

**COMMENTS / RESPONSES  
TO THE  
DRAFT CONFORMITY DETERMINATION**





## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street  
San Francisco, CA 94105-3901

April 28, 2006

LT. Ken Kusano  
United States Coast Guard  
2100 Second Street, S.W.  
Washington, D.C. 20593-1683

**SUBJ: Draft General Conformity Determination Cabrillo Port Liquefied Natural  
Gas Deepwater Port Project**

Dear LT. Kusano:

Thank you for the opportunity to provide comments on the United States Coast Guard's (USCG) Draft General Conformity Determination for the Cabrillo Port Liquefied Natural Gas Deepwater Port Project. Enclosed are our comments. We apologize for providing these comments after the close of your comment period but hope that you will still consider them as you prepare the final General Conformity Determination for this project.

If you have questions about our comments, please contact David Wampler of my staff at (415) 972-3975.

Sincerely,

A handwritten signature in black ink, which appears to read "Lisa B. Hanf".

Lisa B. Hanf  
Chief, Air Planning Office

Enclosures: (1) EPA Comments  
(2) EPA's April 3, 2006 Interim Policy for General Conformity

cc: Gary Honcoop, CARB  
Jill Whynot, SCAQMD  
Mike Villegas, APCO, VCAPCD

## Enclosure 1

**EPA Comments on Draft General Conformity Determination  
Cabrillo Port LNG Facility**

1. The USCG's Draft General Conformity Determination concludes that Nitrogen Oxides (NOx) construction emissions in Los Angeles County would exceed the General Conformity *de minimis* level for NOx of 25 tons per year (tpy). The USCG's Draft General Conformity Determination also concludes that "any Project-related construction emissions in Los Angeles County are deemed to not conform" with the 1997/1999 State Implementation Plan (SIP) and the 2003 Air Quality Management Plan (AQMP)<sup>1</sup> for the South Coast Air Basin. (See page 8). Although the USCG states that BHP Billiton LNG International Inc. (BHPB) has indicated it would fully offset NOx emissions generated from the Project, no documentation has been provided by BHPB to the USCG or the United States Maritime Administration. (See page 8). Because this important information is not available, we agree with USCG's finding that construction-related NOx emissions in Los Angeles County do not conform with the South Coast SIP.

We do not, however, agree with the USCG's final statement on page 8 that, "[u]pon receipt of required documentation from BHPB, a final General Conformity determination will be issued." EPA believes that the March 2006 Draft General Conformity Determination does not meet the requirements of 40 CFR §93.158(d) and 93.156(b) and thus, should not be finalized. Instead, USCG must issue a new Draft (not Final) General Conformity Determination after an affirmative finding of conformity can be made consistent with the requirements of 40 CFR §93.158(d) and §93.156(b). The new determination must also include all "supporting materials which describe the analytical methods and conclusions relied upon in making the applicability analysis and draft conformity determination." (See §93.156(a)).

2. The USCG lists in Table 2 the general conformity threshold of 50 tpy Reactive Organic Compounds (ROC) for Ventura County. This should be revised to 100 tpy because Ventura County, a moderate ozone nonattainment area for the 8-hour standard, is not considered within an "Ozone transport region" (see 40 CFR § 93.153(b)(1)).

3. To clarify that NOx emissions must conform to the 1997/1999 SIP, please add the term "NOx" and delete the last phrase in the sentence on page 8 so it reads: "Therefore, any project-related NOx construction emissions in Los Angeles County are deemed to not conform with the 1997/1999 SIP, ~~and the 2003 AQMP.~~"

4. Please make the following edits to clarify the attainment/nonattainment status of the mainland portions of Ventura and Los Angeles County:

a. On page three, the last full paragraph that begins with, "Since the proposed facility location falls between...." Please add the word "mainland" in the first sentence before the phrase, "Ventura County and the Channel Islands..."

b. At the top of page four, the USCG states, "Since Federal waters are considered attainment/unclassifiable and are not maintenance areas under 40 CFR § 81,

<sup>1</sup> Please note that the PM-10 portion is the only part of the 2003 AQMP approved into the SIP (see 70 FR 69081, November 14, 2005).

## FC001-1

In March 2006, the USCG and MARAD solicited public input on a Draft General Conformity Determination, which concluded that NOx emissions generated from Project construction activities in Los Angeles County were subject to the General Conformity Rule. All other Project-related emissions were determined not to be subject to the General Conformity Rule. Subsequent to the issuance of the Conformity Determination, BHPB provided a written commitment that all onshore pipeline construction equipment would, to the extent possible, utilize engines compliant with USEPA Tier 2, 3, or 4 non-road engine standards with Tier 2 being the minimum standard for any engine.

Project emissions were then reanalyzed to assess the potential emission reductions associated with the stated commitment and to reassess the applicability of the General Conformity Rule. The revised General Conformity analysis concluded that all applicable Project emissions would be less than *de minimis* thresholds in both Ventura and Los Angeles Counties and, therefore, not subject to the General Conformity Rule. Based on this conclusion, the USCG and MARAD will not finalize the Draft General Conformity Determination.

Section 4.6.1.3 and Section 4.6.2 contain revised Project emission estimates and a revised discussion of the applicability of the General Conformity Rule to the Project, respectively. Appendix G4 contains a copy of the revised General Conformity analysis.

## FC001-2

The revised General Conformity Analysis contains a *de minimis* threshold of 100 tons per year for volatile organic compound (VOC) emissions in Ventura County.

## FC001-3

In March 2006, the USCG and MARAD solicited public input on a Draft General Conformity Determination, which concluded that NOx emissions generated from Project construction activities in Los Angeles County were subject to the General Conformity Rule. All other Project-related emissions were determined not to be subject to the General Conformity Rule. Subsequent to the issuance of the Conformity Determination, BHPB provided a written commitment that all onshore pipeline construction equipment would, to the extent possible, utilize engines compliant with USEPA Tier 2, 3, or 4 non-road engine standards with Tier 2 being the minimum standard for any engine.

FC001-1

FC001-2

FC001-3

FC001-4

FC001-5

Project emissions were then reanalyzed to assess the potential emission reductions associated with the stated commitment and to reassess the applicability of the General Conformity Rule. The revised General Conformity analysis concluded that all applicable Project emissions would be less than *de minimis* thresholds in both Ventura and Los Angeles Counties and, therefore, not subject to the General Conformity Rule. Based on this conclusion, the USCG and MARAD will not finalize the Draft General Conformity Determination.

Section 4.6.1.3 and Section 4.6.2 contain revised Project emission estimates and a revised discussion of the applicability of the General Conformity Rule to the Project, respectively. Appendix G4 contains a copy of the revised General Conformity analysis.

#### FC001-4

The revised General Conformity analysis contains additional text to distinguish mainland Ventura County from the Channel Islands.

#### FC001-5

The revised General Conformity Analysis clarifies that the USEPA made a preliminary determination that Federal waters have not been designated with respect to air quality attainment.

any emissions...” Please revise this sentence as follows: “Since Federal waters ~~are considered attainment/unclassifiable and are not maintenance areas~~ have not been designated under 40 CFR § 81, any emissions....”

FC001-5  
Continued

FC001-5 Continued

5. On April 5, 2006, the one-year grace period for PM-2.5 general conformity expired. On that day, EPA published a direct final rule with an accompanying proposal that identifies the PM-2.5 de minimis levels of 100 tons per year. (See 71 FR 17003). Footnote “a” in Table 3 should be revised to identify this rulemaking. Please note this direct final rule is not yet effective and depends on whether EPA receives adverse comments on the direct final rule. In the meantime, we issued guidance on April 3, 2006 to assist federal agencies in complying with general conformity for PM-2.5. We have enclosed a copy of this guidance for your information (Enclosure 2).

FC001-6

FC001-6

The revised General Conformity Analysis contains updated information on the de minimis emission thresholds for PM<sub>2.5</sub>. These thresholds are based on revisions to the General Conformity Rule promulgated in July 2006 to specifically address PM<sub>2.5</sub> de minimis emission thresholds (71 FR 40420).



Enclosure 2

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
RESEARCH TRIANGLE PARK, NC 27711

APR 3 2006

OFFICE OF  
AIR QUALITY PLANNING  
AND STANDARDS

**MEMORANDUM**

SUBJECT: Interim Policy for General Conformity Applicability in PM2.5  
Nonattainment Areas

FROM: William T. Harnett *William Harnett*  
Director, Air Quality Policy Division

TO: Regional Air Division Directors

In accordance with the General Conformity Regulations which apply to Federal actions in nonattainment areas one year after the areas are designated nonattainment, General Conformity requirements become effective for Federal actions in PM2.5 nonattainment areas after April 5, 2006. The General Conformity Regulations require a general conformity determination for Federal actions in nonattainment and maintenance areas where direct and indirect emissions are equal or exceed rates specified in the rule. Federal actions with emissions below these levels are considered to have emission increases that are clearly de minimis and do not have to make conformity determinations.

The Environmental Protection Agency (EPA) is issuing a direct final rule with an accompanying proposal to establish de minimis levels for emissions of PM2.5 and its precursors. The de minimis levels for PM2.5 and its precursors are not effective upon publication of the direct final rule, and therefore are subject to change. In the absence of adverse comments this rule will become effective in 60 days or possibly longer if there are comments EPA must consider. Therefore, there will be a period of time where Federal agencies will have to perform General Conformity applicability analysis without the benefit of published de minimis thresholds for PM2.5.

During this time EPA believes it is appropriate for Federal agencies to use the PM-10 de minimis level of 100 tons per year as a surrogate for PM2.5 de minimis levels in their General Conformity applicability analysis. Since PM2.5 emissions are a subset of PM-10 emissions, PM2.5 emissions and its precursors will always be less than PM-10 (PM-10 consists of all particulate matter measuring 10 microns and below). Though PM2.5 may be formed in the atmosphere from precursor emissions (nitrous oxides, sulfur dioxide, VOC and ammonia) the use of the PM-10 thresholds serves as a reasonable surrogate for the precursor emissions and their contribution to PM2.5 nonattainment. Under this guidance, if an action's direct or indirect emissions of PM2.5, or any precursor that has been identified as a

significant contributor to nonattainment for a specific PM<sub>2.5</sub> nonattainment area, exceed the 100 ton per year threshold, a General Conformity determination would be required.

If you have questions about the applicability of the General Conformity regulations in PM<sub>2.5</sub> nonattainment areas please contact Tom Coda at 919-541-3037.

cc: Kevin McLean, OGC  
Sara Schneeberg, OGC  
Robert Moyer, OGC  
Robert Meyers, OAR  
Kimber Scavo, OAQPS  
Tom Coda, OAQPS  
Robert Hargrove, NEPA Compliance Division  
Merrylin Zaw-Mon, OTAQ



BHP Billiton LNG International Inc.  
300 Esplanade Drive, Suite 1800  
Oxnard, California 93036 USA  
Tel 805 604 2790 Fax 805 604 2799  
[www.bhpbilliton.com](http://www.bhpbilliton.com)

April 13, 2006

**LT KEN KUSANO**  
**U.S. COAST GUARD HEADQUARTERS**  
**DEEPWATER PORT STANDARDS DIVISION (G-MSD-5))**  
2100 2<sup>nd</sup> Street SW  
Washington, DC 20593-0001

**Re: Comments on Draft Conformity Analysis**

Dear Lt Kusano:

BHP Billiton LNG International, Inc. ("BHPB") reviewed the draft General Conformity Determination prepared by the U.S. Coast Guard ("USCG") for the Cabrillo Port project and dated March 2006. In that document you requested comments by April 14, 2006 at 5:00 pm Eastern Standard Time. BHPB respectfully submits the following timely comments regarding the draft General Conformity Determination.

BHPB generally agrees with USCG's applicability assessment. As you note, Cabrillo Port is located outside of any nonattainment area and so its emissions are not subject to General Conformity. However, project-related construction activities take place within both Ventura County and Los Angeles County. Ventura County is nonattainment for ozone only and Los Angeles County is nonattainment for ozone, carbon monoxide, PM<sub>10</sub> and PM<sub>2.5</sub>. Therefore, only those pollutants (NO<sub>x</sub> and VOC/ROC as precursors for ozone) need be evaluated to determine whether they are under significance thresholds for their respective counties. As you noted, all pollutants other than NO<sub>x</sub> were below the significance thresholds and so are not subject to General Conformity.

Subsequent to your receipt of the construction emissions numbers, BHPB determined that there was a flaw in the construction emission calculations that cause overall emissions to be overestimated by approximately 15 percent. The most recent iteration of the project construction emission estimates were based upon the URBEMIS2002, Appendix H emission factors for the period 1996-2000. However, URBEMIS2002, Appendix H provides emission factors for three distinct time periods (pre-1996, 1996-2000, and 2001+) and specifies a methodology for prorating emission factors based upon engine/equipment turnover. For example, Appendix H indicates that the turnover rate for

**GC002-1**

In March 2006, the USCG and MARAD solicited public input on a Draft General Conformity Determination, which concluded that NO<sub>x</sub> emissions generated from Project construction activities in Los Angeles County were subject to the General Conformity Rule. All other Project-related emissions were determined not to be subject to the General Conformity Rule. Subsequent to the issuance of the Conformity Determination, BHPB provided a written commitment that all onshore pipeline construction equipment would, to the extent possible, utilize engines compliant with USEPA Tier 2, 3, or 4 non-road engine standards with Tier 2 being the minimum standard for any engine.

Project emissions were then reanalyzed to assess the potential emission reductions associated with the stated commitment and to reassess the applicability of the General Conformity Rule. The revised General Conformity analysis concluded that all applicable Project emissions would be less than *de minimis* thresholds in both Ventura and Los Angeles Counties and, therefore, not subject to the General Conformity Rule. Based on this conclusion, the USCG and MARAD will not finalize the Draft General Conformity Determination.

Section 4.6.1.3 and Section 4.6.2 contain revised Project emission estimates and a revised discussion of the applicability of the General Conformity Rule to the Project, respectively. Appendix G4 contains a copy of the revised General Conformity analysis.

GC002-1

Lt Ken Kusano  
USCG  
April 13, 2006  
Page 2 of 3

the “bore/drill rigs” category is three (3) years while the turnover rate for the “cranes” category is nine (9) years. The construction emissions calculation in the draft General Conformity determination did not utilize the engine/equipment turnover methodology as dictated by URBEMIS2002, Appendix H.

The attached revised construction emission spreadsheets for Project onshore construction activity incorporate the URBEMIS2002, Appendix H engine/equipment turnover methodology. Annual emission rates for these construction activities were estimated using construction vehicle/equipment type in grams per horsepower hour and fleet averages based on vehicle turnover rates. The revised emission spreadsheets include footnotes with the emission factors listed by construction vehicle/equipment type.

Correcting the construction activity emission factors reduces NO<sub>x</sub> emissions occurring in Los Angeles County to 24.16 tons per year based upon the emission calculation procedures outlined above. As you note in the draft determination, the General Conformity threshold in Los Angeles County is 25 tons per year. Since the these revised NO<sub>x</sub> emission estimates fall below the General Conformity emission thresholds for NO<sub>x</sub>, a General Conformity Determination is not required.

BHPB notes that in the draft Conformity Determination, the Coast Guard states that BHP “indicated that it would fully offset NO<sub>x</sub> emissions generated from Project construction in Los Angeles County through the acquisition of emission credits or an equally enforceable measure that would result in emissions reductions equal to or greater than Project emissions in Los Angeles County.” BHP respectfully notes that it has never indicated that it would offset its construction NO<sub>x</sub> emissions in Los Angeles County. Instead, BHP has repeatedly stated that it would mitigate emissions to the extent required under the State Implementation Plan and CEQA requirements. Because the construction NO<sub>x</sub> emissions in Los Angeles County (as well as Ventura County) are not considered significant, there is no need for mitigation.

## GC002-1 Continued

GC002-1  
Continued

### GC002-2


The revised General Conformity analysis concludes that all applicable Project emissions would be less than de minimis thresholds in both Ventura and Los Angeles Counties and, therefore, not subject to the General Conformity Rule. Section 4.6.1.3 and Section 4.6.2 of the Final EIS/EIR contain revised Project emission estimates and a revised discussion of the applicability of the General Conformity Rule to the Project, respectively. Appendix G4 contains a copy of the revised General Conformity analysis. Section 4.6.4 of the Final EIS/EIR contains information on the air quality impacts associated with Project construction activities and applicable mitigation measures.

GC002-2

Lt Ken Kusano  
USCG  
April 13, 2006  
Page 3 of 3

Please contact me if there are any questions about these comments.

Sincerely,

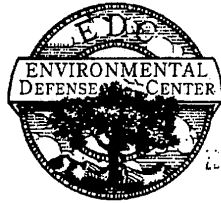
A handwritten signature in blue ink, appearing to read "Renee Klimczak", with a stylized flourish at the end.

Renee Klimczak  
President, BHP Billiton LNG International

Attachments: Revised Construction Emission Calculation Spreadsheets

Copy to: Dwight Sanders, California State Lands Commission



U.S. DEPARTMENT OF TRANSPORTATION  
DOCKETS

2006 APR 27 P 3:29

April 13, 2006

Lieutenant Ken Kusano  
U.S. Coast Guard  
Docket Management Facility  
Room PL-401, Plaza Level  
Nassif Building  
400 Seventh St., SW  
Washington D.C. 20590-0001

VIA OVERNIGHT DELIVERY

**RE: Docket No. USCG-2004-16877 – Draft General Conformity Determination  
for the Cabrillo Port Liquefied Natural Gas Deepwater Port Project  
(March 2006)**

Lieutenant Kusano:

The following comments are submitted by the Environmental Defense Center on behalf of our client, the California Coastal Protection Network ("CCPN"), regarding the Draft General Conformity Determination for the Cabrillo Port Liquefied Natural Gas Deepwater Port project. CCPN is a California public benefit corporation, dedicated to the protection of the California coast through education, research, and empowerment of public citizens. CCPN is headquartered in Santa Barbara, California and its membership includes individuals in Santa Barbara, Ventura, and Los Angeles Counties.

The U.S. Coast Guard and the U.S. Maritime Administration (referred to here collectively as the "Coast Guard") are responsible for determining whether BHP Billiton, Inc. may receive a permit under the Deepwater Port Act to construct and operate the Cabrillo Port Liquefied Natural Gas Deepwater Port Project ("Cabrillo Port Project"). 33 U.S.C. § 1501 et seq. The Coast Guard, therefore, has the affirmative responsibility under the Clean Air Act to ensure that the Cabrillo Port Project "conforms" to the applicable State Implementation Plan ("SIP"), a document that identifies the control measures and strategies that will be necessary for an area to achieve clean air. 42 U.S.C. § 7506(c)(1).

In March of 2006, the Coast Guard issued a Draft General Conformity Determination ("Draft Conformity Determination") to attempt to fulfill its Clean Air Act responsibilities. As a general matter, EDC agrees with the Coast Guard's conclusion that construction related emissions in Los Angeles County do not conform with the most

GC001-1

In March 2006, the USCG and MARAD solicited public input on a Draft General Conformity Determination, which concluded that NOx emissions generated from Project construction activities in Los Angeles County were subject to the General Conformity Rule. All other Project-related emissions were determined not to be subject to the General Conformity Rule. Subsequent to the issuance of the Conformity Determination, BHPB provided a written commitment that all onshore pipeline construction equipment would, to the extent possible, utilize engines compliant with USEPA Tier 2, 3, or 4 non-road engine standards with Tier 2 being the minimum standard for any engine.

Project emissions were then reanalyzed to assess the potential emission reductions associated with the stated commitment and to reassess the applicability of the General Conformity Rule. The revised General Conformity analysis concluded that all applicable Project emissions would be less than *de minimis* thresholds in both Ventura and Los Angeles Counties and, therefore, not subject to the General Conformity Rule. Based on this conclusion, the USCG and MARAD will not finalize the Draft General Conformity Determination.

Section 4.6.1.3 and Section 4.6.2 contain revised Project emission estimates and a revised discussion of the applicability of the General Conformity Rule to the Project, respectively. Appendix G4 contains a copy of the revised General Conformity analysis.

GC001-1

recent EPA approved SIP for that area. However, we disagree with the Coast Guard's conclusion that construction related emissions in Ventura County do not trigger general conformity review.

The Draft Conformity Determination is also seriously flawed because the Coast Guard fails to evaluate the full scope of emissions resulting from the Cabrillo Port Project. The Coast Guard excludes from consideration all emissions from offshore construction and operation – i.e., the majority of emissions associated with this project. Although these emissions are initially generated offshore, they will blow onshore and significantly increase the pollution burden in Ventura and Los Angeles Counties. The Coast Guard also fails to consider the increased NOx emissions that may be released from residential and industrial sources that will use the natural gas imported via the Cabrillo Port Project.

A full accounting and review of the Cabrillo Port Project emissions will demonstrate that the Project does not conform to the SIPs for Ventura and Los Angeles Counties. Both of these areas are designated “non-attainment” for ozone, an air pollutant that causes serious health problems, particularly for individuals who exercise outdoors and for children and adults with asthma and chronic pulmonary lung disease. Ozone also causes serious agricultural damage. The Cabrillo Port Project will undermine Ventura and Los Angeles Counties’ efforts to achieve healthy air quality levels for ozone.

EDC's comments are presented in more detail below.<sup>1</sup> The Draft Conformity Determination must be revised to address the identified inadequacies, and the revised Draft conformity determination must also be re-circulated for an additional round of public comment.

## I. Legal Framework

Section 176(c)(1) of the Clean Air Act (“CAA”) requires that:

No department, agency, or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve, an activity which does not conform to an implementation plan after it has been approved or promulgated under section 7410 of this title . . . . The assurance of conformity to such an implementation plan shall be an affirmative

<sup>1</sup> These comments are submitted in compliance with the April 14, 2006 deadline imposed in the Draft Conformity Determination. Draft Conformity Determination at 8. However, the Coast Guard has separately indicated that “any comments relating to air quality or the underlying Draft General Conformity Determination will be accepted until the end of the DEIR comment period.” Prescott 2006. We will thus identify additional comments relevant to the Coast Guard's general conformity determination when we submit comments on the California State Lands Commission's Revised Draft Environmental Impact Report.

GC001-1  
Continued

GC001-1 Continued

GC001-2

GC001-2

Since the location proposed FSRU falls between mainland Ventura County and the Channel Islands, the USEPA had discretion in determining which regulatory requirements would be applied to the FSRU. The USEPA determined that it would regulate and permit the FSRU in the same manner as emission sources in the Federal attainment area, i.e., in the same manner as sources on the Channel Islands. Federal actions in the Channel Islands are not subject to General Conformity because the region is not classified as a Federal nonattainment or maintenance area. Therefore, the USEPA made a preliminary determination that the proposed issuance of a permit under the Deepwater Port Act and any other Federal action directly associated with FSRU operations would not be subject to the General Conformity Rule. Thus, any emissions related to FSRU installation and operations (including support vessel operation) in attainment, maintenance, or nonattainment areas would not be subject to General Conformity.

GC001-3

The USEPA has further concluded that portions of the Pacific Ocean that are beyond the federally recognized limit of California (i.e., in Federal waters) have not been designated with respect to NAAQS. Since Federal waters have not been designated under 40 CFR 81, any emissions generated from Project-related operations and construction that occur in Federal waters are not subject to the General Conformity Rule.

Project-related construction activities, such as the installation of offshore and onshore pipelines, would also require Federal actions (e.g., licenses, permits, and/or approvals from Federal agencies) that could be applicable to the General Conformity Rule. Since Ventura County and Los Angeles County (within the South Coast Air Basin) are considered as nonattainment or maintenance areas for at least one criteria pollutant, direct and indirect emissions associated with Federal actions taken for Project construction in Ventura and Los Angeles Counties (including Ventura County waters) were analyzed to determine applicability to the General Conformity Rule.

GC001-3

In March 2006, the USCG and MARAD solicited public input on a Draft General Conformity Determination, which concluded that NOx emissions generated from Project construction activities in Los

Angeles County were subject to the General Conformity Rule. All other Project-related emissions were determined not to be subject to the General Conformity Rule. Subsequent to the issuance of the Conformity Determination, BHPB provided a written commitment that all onshore pipeline construction equipment would, to the extent possible, utilize engines compliant with USEPA Tier 2, 3, or 4 non-road engine standards with Tier 2 being the minimum standard for any engine.

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Section 4.6.1.3 and Section 4.6.2 contain revised Project emission estimates and a revised discussion of the applicability of the General Conformity Rule to the Project, respectively. Appendix G4 contains a copy of the revised General Conformity analysis.

April 13, 2006

EDC Draft General Conformity Determination Comments

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responsibility of the head of such department, agency, or instrumentality.  
Conformity to an implementation plan means –

(A) conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the [NAAQS] and achieving expeditious attainment of such standards; and

(B) that such activities will not –

- (i) cause or contribute to any new violation of any standard in any area;
- (ii) increase the frequency or severity of any existing violation of any standard in any area;
- (iii) or delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.

42 U.S.C. § 7506(c)(1).

These specific provisions were added to the CAA in 1990 for the explicit purpose of ensuring that:

Federal agencies do not take or support actions which are in any way inconsistent with the effort to achieve [the National Ambient Air Quality Standards] or which fail to take advantage of opportunities to help in the effort to achieve [the National Ambient Air Quality Standards].

H. Rep. 101-490, 101<sup>st</sup> Cong., 2d Sess. 222 (1990). See also, S. Rep. 101-228, 101<sup>st</sup> Cong., 2d Sess. 28 (1990) ("The purpose of the conformity language is to assure that before in any way participating in an activity, a Federal agency must find that the activity does not cause or contribute to violations of an ambient standard in any area, does not increase the severity or frequency of existing violations, and does not delay progress in achieving ambient standards in any nonattainment area . . . By evaluating air quality impacts of proposed activities before they are undertaken, future pollution problems can be prevented.")

In November of 1993, the U.S. Environmental Protection Agency ("EPA") promulgated regulations establishing the criteria and procedures for determining conformity of Federal actions – or "general conformity." 58 Fed. Reg. 63214 (Nov. 30, 1993).<sup>2</sup> These regulations were subsequently incorporated by reference into the Ventura

<sup>2</sup> A different set of regulations applies to "transportation conformity" decisions. See, e.g., 58 Fed. Reg. 62188 (Nov. 24, 1993). These regulations do not apply to the Coast Guard's decision for the Cabrillo Port Project.

County Air Pollution Control District ("VCAPCD") rules and the South Coast Air Quality Management District ("SCAQMD") rules. VCAPCD Rule 220; SCAQMD Rule 1901. For the sake of simplicity, this comment letter will reference the Code of Federal Regulations sections (40 C.F.R. Part 51, Subpart W) rather than each District's rules. However, it is the Districts' rules that govern the Coast Guard's determination.<sup>3</sup>

## II. Emissions From Onshore Construction Activities In Los Angeles County

The Draft Conformity Determination concludes that NOx emissions from onshore construction activities in Los Angeles County are subject to the General Conformity Rule and that these emissions "are deemed not to conform" with the 1997/1999 SIP. Draft Conformity Determination at 8. We agree with this conclusion. However, we have several significant concerns with the Coast Guard's determination.

First, the Coast Guard appears to improperly rely on SIP updates that have not been approved by EPA. The Coast Guard states that these emissions do not conform with SCAQMD's 2003 Air Quality Management Plan (AQMP). Draft Conformity Determination at 8. The Coast Guard also suggests that emission budget revisions to the 2003 AQMP or 2007 SIP could satisfy the conformity criteria. Draft Conformity Determination at 7. However, the conformity determination must be based only on the most recent EPA approved SIP. 40 C.F.R. § 51.852; 58 Fed. Reg. 63214, 63237-38. The most recent EPA approved SIP for SCAQMD is the 1997/1999 SIP. Draft Conformity Determination at 7. The 2003 AQMP and the 2007 SIP have not been approved by EPA. *Id.* Therefore, the Coast Guard cannot rely on the 2003 AQMP, any other SIP update, or any future modifications to such documents unless and until they are approved by EPA.

Second, it appears that the Coast Guard has omitted at least one of the general conformity criteria from its analysis.<sup>4</sup> The Coast Guard states that construction emissions

<sup>3</sup> The Draft Conformity Determination references 40 C.F.R. Part 93, Subpart W when describing general conformity criteria and procedures. Draft Conformity Determination at 6-7. Part 93 and Part 51 are identical in terms of the criteria and procedures governing general conformity determination. 58 Fed. Reg. 63214, 63215. The Part 93 provisions were promulgated by EPA so that the general conformity requirements would be immediately effective in the interim period before states revised their SIPs consistent with the Part 51 provisions. Once the SIPs were revised, however, federal agencies became subject to the general conformity requirements in the SIP. *Id.*

<sup>4</sup> It is difficult to know with certainty which criteria the Coast Guard does include in its conformity analysis because the Agency does not provide any specific citations in its description of the criteria or in its findings. Draft Conformity Determination at 6-7. It appears that the second, third, and fourth bullet points on page 6 identify the provisions of 40 C.F.R. § 51.158(a). The first bullet may be identifying the requirement of 40 C.F.R. § 51.158(c), but if so, it is an incomplete description of that requirement, and, as discussed above, it is improperly identified as one of several options to demonstrate conformity. The revised Draft Conformity Determination must clearly identify the

### GC001-4

The revised General Conformity analysis concludes that all applicable Project emissions would be less than *de minimis* thresholds in both Ventura and Los Angeles Counties and, therefore, not subject to the General Conformity Rule. Therefore, further review of conformity to the State Implementation Plan (SIP) (and current air quality management plans) is not required.

Section 4.6.1.3 and Section 4.6.2 contain revised Project emission estimates and a revised discussion of the applicability of the General Conformity Rule to the Project, respectively. Appendix G4 contains a copy of the revised General Conformity analysis.

GC001-4

### GC001-5

The revised General Conformity analysis concludes that all applicable Project emissions would be less than *de minimis* thresholds in both Ventura and Los Angeles Counties and, therefore, not subject to the General Conformity Rule. Therefore, further review of conformity to the State Implementation Plan (SIP) (and current air quality management plans) is not required.

Section 4.6.1.3 and Section 4.6.2 contain revised Project emission estimates and a revised discussion of the applicability of the General Conformity Rule to the Project, respectively. Appendix G4 contains a copy of the revised General Conformity analysis.

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in Los Angeles County must meet any one of the criteria identified in 40 C.F.R. § 93.158 (51.158). Draft Conformity Determination at 6. The general conformity criteria, however, clearly require that an action can only be deemed to conform if it meets any one of the provisions of 40 C.F.R. § 51.158(a) (which EPA refers to as the "air quality criteria") *as well as* the requirements in 40 C.F.R. § 51.158(c) (which EPA refers to as the "emissions criteria"). 40 C.F.R. § 51.158(a) (an action will be deemed to conform if "the action meets the requirements of paragraph (c) of this section, *and* meets any of the following requirements . . .") (emphasis added); 58 Fed. Reg. 13836, 13844-46 (Mar. 15, 1993) ("The CAA establishes *both* air quality related criteria and emissions related criteria which must be met before an action can be determined to conform to the applicable SIP," and discussing the different criteria) (emphasis added). It thus seems that the Coast Guard has failed to consider, at least, the requirements of 40 C.F.R. § 51.158(c).

Section 51.158(c) states that "Notwithstanding any other requirements of this section" an action does not conform to a SIP unless emissions from the action are:

in compliance or consistent with all relevant requirements and milestones contained in the applicable SIP, such as elements identified as part of the reasonable further progress schedules, assumptions specified in the attainment or maintenance demonstration, prohibitions, numerical emission limits, and work practice requirements.

40 C.F.R. § 51.158(c). In order to demonstrate conformity, the Coast Guard must establish that this action meets these requirements, as well as the requirements of 40 C.F.R. § 51.158(a). It is possible that the Coast Guard has omitted consideration of 40 C.F.R. § 51.158(c) because it otherwise determined the onshore construction emissions in Los Angeles County would not conform to the SIP. However, since the Coast Guard is apparently providing BHP Billiton with an additional opportunity to "file all appropriate documentation" to otherwise demonstrate conformity, it is critical that the Coast Guard properly consider all of the general conformity criteria for any future evaluations of the Cabrillo Port Project. Draft Conformity Determination at 7-8.

Third, it appears that the estimated emissions for construction are based on unsupported and unreasonably optimistic assumptions regarding the construction schedule and emission inventory. Sears 2006<sup>5</sup> at 10-12. "Delays or underestimated activity days translate into additional construction emissions not accounted for in the Draft Conformity Determination." *Id.* at 12. The Coast Guard should revise the estimated emissions to reflect a more realistic construction schedule. Although, the Coast Guard has already determined that, even under their unrealistic assumptions, construction emissions

criteria by reference to the applicable regulations so that the public can identify the basis for the Coast Guard's evaluation and decision.

<sup>5</sup> Camille Sears, an air quality expert with over 25 years of professional experience, has reviewed and prepared comments on the Coast Guard's Draft Conformity Determination. Sears 2006. These comments are referenced throughout this letter, and Ms. Sears' April 13, 2006 comment letter in its entirety is incorporated herein by reference.

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GC001-5 Continued

GC001-6

The emissions analyses are derived from and consistent with historic operation and construction schedules of comparable projects and thereby incorporate typical deviations from normal conditions.

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in Los Angeles County will not conform to the applicable SIP, it is still necessary for the Coast Guard to identify a realistic estimate of emissions. This estimate will determine the appropriate amount of mitigation or offsets required for the project to conform to the applicable SIP, and under current assumptions, the Coast Guard is underestimating the amount of mitigation or offsets that will be required. Id.

Lastly, we are concerned that fundamental information relevant to the Coast Guard's general conformity determination has not been provided to the public for an opportunity to review and comment. As mentioned above, it appears that BHP Billiton is being afforded another opportunity to provide the Coast Guard with information that could support a finding of conformity. Draft Conformity Determination at 7-8. This information must be provided to the public for review and comment before the Coast Guard can rely upon it to make conformity decisions. 40 C.F.R. § 51.856; see, also, Ober v. U.S. EPA, 84 F.3d 304, 313-316 (9th Cir. 1996) (holding that post-comment period information that is critical to agency's decision must be made available for public review and comment before the agency makes its final decision). The Coast Guard cannot deprive the public of its right to evaluate information critically important to the General Conformity Determination.

### III. Emissions From Onshore Construction Activities In Ventura County

The Coast Guard has concluded that construction emissions in Ventura County are not subject to the General Conformity Rule. Draft Conformity Determination at 5. However, as with the construction emissions in Los Angeles County, the construction emissions in Ventura County have been underestimated. Sears 2006 at 10-12. As a result, the Coast Guard's conclusion that Ventura County construction emissions will not exceed the de minimus thresholds triggering a general conformity determination is questionable.

The Coast Guard estimates Ventura County NOx emissions at 86.4 tons per year, only 14 tons per year under the de minimus threshold of 100 tons/year for Ventura County. Draft Conformity Determination at 5. Any variance from the optimistic assumptions underlying this emissions estimate – including a minor schedule delay, an underestimation of the number of equipment needed, an underestimation of the equipment size and horsepower necessary, or an underestimation of the equipment load – could easily result in NOx emissions greater than 100 tons/year. Sears 2006 at 11-12.

The Coast Guard must revise the Ventura County construction emissions estimates to reflect more realistic and reasonable schedule and equipment assumptions. We believe more realistic assumptions are likely to result in total estimated emissions that will equal or exceed the de minimus threshold for NOx emissions in Ventura County. Id. Such emissions must be analyzed for conformity to the applicable SIP. Id.

### IV. Emissions From Offshore Construction And Operation Activities

The Coast Guard has concluded that "any emissions related to FSRU installation and operations (including support vessel operation) in attainment, maintenance, or

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GC001-7

GC001-7  
In March 2006, the USCG and MARAD solicited public input on a Draft General Conformity Determination, which concluded that NOx emissions generated from Project construction activities in Los Angeles County were subject to the General Conformity Rule. All other Project-related emissions were determined not to be subject to the General Conformity Rule. Subsequent to the issuance of the Conformity Determination, BHPB provided a written commitment that all onshore pipeline construction equipment would, to the extent possible, utilize engines compliant with USEPA Tier 2, 3, or 4 non-road engine standards with Tier 2 being the minimum standard for any engine.

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Project emissions were then reanalyzed to assess the potential emission reductions associated with the stated commitment and to reassess the applicability of the General Conformity Rule. The revised General Conformity analysis concluded that all applicable Project emissions would be less than *de minimis* thresholds in both Ventura and Los Angeles Counties and, therefore, not subject to the General Conformity Rule. Based on this conclusion, the USCG and MARAD will not finalize the Draft General Conformity Determination.

Section 4.6.1.3 and Section 4.6.2 contain revised Project emission estimates and a revised discussion of the applicability of the General Conformity Rule to the Project, respectively. Appendix G4 contains a copy of the revised General Conformity analysis.

GC001-8

The emissions analyses are derived from and consistent with historic operation and construction schedules of comparable projects and thereby incorporate typical deviations from normal conditions.

GC001-9

GC001-9  
Since the location proposed FSRU falls between mainland Ventura County and the Channel Islands, the USEPA had discretion in determining which regulatory requirements would be applied to the FSRU. The USEPA determined that it would regulate and permit the FSRU in the same manner as emission sources in the Federal attainment area, i.e., in the same manner as sources on the Channel Islands. Federal actions in the Channel Islands are not

subject to General Conformity because the region is not classified as a Federal nonattainment or maintenance area. Therefore, the USEPA made a preliminary determination that the proposed issuance of a permit under the Deepwater Port Act and any other Federal action directly associated with FSRU operations would not be subject to the General Conformity Rule. Thus, any emissions related to FSRU installation and operations (including support vessel operation) in attainment, maintenance, or nonattainment areas would not be subject to General Conformity.

The USEPA has further concluded that portions of the Pacific Ocean that are beyond the federally recognized limit of California (i.e., in Federal waters) have not been designated with respect to NAAQS. Since Federal waters have not been designated under 40 CFR 81, any emissions generated from Project-related operations and construction that occur in Federal waters are not subject to the General Conformity Rule.

Project-related construction activities, such as the installation of offshore and onshore pipelines, would also require Federal actions (e.g., licenses, permits, and/or approvals from Federal agencies) that could be applicable to the General Conformity Rule. Since Ventura County and Los Angeles County (within the South Coast Air Basin) are considered as nonattainment or maintenance areas for at least one criteria pollutant, direct and indirect emissions associated with Federal actions taken for Project construction in Ventura and Los Angeles Counties (including Ventura County waters) were analyzed to determine applicability to the General Conformity Rule.

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nonattainment areas would not be subject to General Conformity.” Draft Conformity Determination at 3. Similarly, the Coast Guard has concluded that “any emissions generated from Project-related operations and construction that occur in Federal waters are not subject to the General Conformity Rule.” *Id.* at 4. The Coast Guard’s decision to exclude consideration of these emissions, which comprise the bulk of project emissions, from the Draft Conformity Determination is legally and factually unsupportable.

a. Federal Law Requires That The Cabrillo Port Project Be Regulated As If It Were Located In A Nonattainment Area For Ozone

The Coast Guard’s conclusion rests on the erroneous premise that offshore construction and operation emissions are generated in areas designated as “attainment/unclassifiable.” *Id.* at 3-4. We dispute this premise.

i. The Deepwater Port Act and the Clean Air Act Require Application of Onshore Air Quality rules to a Deepwater Port

The Deepwater Port Act (“DPA”) regulates the licensing and operation of deepwater ports and expressly requires consistency with all local, state and federal laws. For purposes of ensuring that the air emissions from a deepwater port are regulated under local, state and federal laws, a deepwater port “shall be considered as a new source under the CAA, as amended (42 U.S.C. 7401 et seq.) . . .” DPA § 1502 (9). In fact, conformity with all provisions of the Clean Air Act (“CAA”) is a condition of issuance of the Deepwater Port license. DPA § 1503(C)(6).

Contemplating that the regulation of a Deepwater port located in federal waters may exempt it from several environmental laws, the DPA expressly provides that “the law of the nearest adjacent coastal State . . . is declared to be the law of the United States and shall apply to any deepwater port licensed pursuant to this chapter . . .” DPA § 1518 (a). “Nearest adjacent coastal state” is defined as the State located within 15 miles of the port and whose boundaries if extended seaward beyond three miles would encompass the port. DPA § 1502 (B); 1518(b). These provisions are relevant to determine which local air district rules apply to Cabrillo Port for purposes of the CAA, which delegates authority to the States to control air quality. As the permitting agency for Cabrillo Port, EPA has determined that VCAPCD Local Rules shall apply. Zimpfer 2005.

Thus, even though Cabrillo Port is physically located in an area outside local and state jurisdiction, the DPA insists the federal agencies apply VCAPCD’s local rules for purposes of regulating and evaluating air quality impacts. As discussed below, the Coast Guard must ensure these rules be applied in manner that protects the state’s air quality, and does not contribute to the federal and state non-attainment status of ozone for Ventura County and LA County. By excluding the offshore portion of the Cabrillo Port Project from the General Conformity Rule the Coast Guard has failed to follow its statutory mandate.

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GC001-10

Pursuant to DPA 1503(c)(6), USCG may issue a license if it is not informed by USEPA that the deepwater port does not conform with all applicable provisions of the Clean Air Act.

The USEPA determined that it would regulate and permit the FSRU in the same manner as emission sources in the Federal attainment area, i.e., in the same manner as sources on the Channel Islands. As Federal actions in the Channel Islands are not subject to General Conformity because the region is not classified as a Federal nonattainment or maintenance area, the USEPA made a preliminary determination that the proposed issuance of a permit under the DPA and any other Federal action directly associated with FSRU operation would not be subject to the General Conformity Rule.

The USEPA has further concluded that portions of the Pacific Ocean that are beyond the federally recognized limit of California (i.e., in Federal waters) have not been designated with respect to NAAQS. Since Federal waters have not been designated under 40 CFR 81, any emissions generated from Project-related operations and construction that occur in Federal waters are not subject to the General Conformity Rule.

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ii. *The Draft Conformity Determination Incorrectly Concludes that Federal Waters are "Attainment/Unclassifiable"*

The Draft Conformity Determination incorrectly concludes "Federal waters are considered attainment/unclassifiable and are not maintenance areas under 40 CFR 81." Draft Conformity Determination, p. 4. Based on this conclusion, the Coast Guard excludes any emissions generated by Cabrillo Port from operations or construction that occur in federal waters. This exclusion from the General Conformity Rules is legally indefensible for the following five reasons.

First, federal waters have not been designated as attainment, non-attainment or unclassifiable. 40 CFR part 81.305. In fact, EPA informed the Coast Guard that federal waters have not been designated. Zimpfer 2005. The Coast Guard's statement that "Federal waters are considered attainment/unclassifiable . . ." is wrong. The Coast Guard's decision to exclude the offshore emissions from Cabrillo Port relies on this false legal premise and is therefore unlawful.

Second, the DPA expressly mandates that a deepwater port, though located in federal waters, such as Cabrillo Port, should not be exempt from the *nearest* onshore environmental regulations. Cabrillo Port is located just 14 miles from the nearest onshore point in Ventura County, whereas it is located more than 18 and 24 miles from Anacapa and San Nicolas Islands, respectively. Thus, the geographically closest air quality designations must apply to Cabrillo Port – which in this case is the federally designated non-attainment onshore area in Ventura County.

Third, Congress directed the application of local and state law specifically to those ports located within 15 miles of the nearest onshore boundary when it defined "nearest adjacent coastal state" in the DPA. DPA §§ 1502 (B); 1518(b). A deepwater port, such as Cabrillo Port, located between 3 and 15 miles is located in Federal waters. As such, a deepwater port located in federal waters within 15 miles of a coastal state must be regulated in a manner consistent with the onshore air quality designations assigned by the state, even if those laws are more stringent than federal laws. Section 19 (b) of Senate Report 93-1217 (Oct. 2, 1974). In this case the corresponding onshore area is non-attainment for ozone pre-cursors under both federal and state designations, thus the General Conformity Rule does apply to all of the offshore emissions from the Cabrillo Port project in federal waters.

Fourth, according to EPA, attainment designations have intentionally not been assigned to Federal waters because existing outer continental shelf ("OCS") sources are covered by OCS Air Regulations. Rios 2004c. OCS sources located within 25 miles of California's seaward boundary are regulated in accordance with the corresponding onshore area's designation for each pollutant because offshore sources can contribute to onshore non-attainment problems. CAA § 328 (a)(1); and 40 C.F.R. Part 55; see, also, Sears 2006 at 4-10. When Congress enacted the DPA it intended to regulate offshore sources in a similar manner as OCS sources under the OCSLA. See Section 19(b) of Senate Report 93-1217 (Oct. 2, 1974) regarding the meaning of DPA § 1518(b), "The

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The revised General Conformity Analysis clarifies that the USEPA made a preliminary determination that Federal waters have not been designated with respect to air quality attainment.

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Since the location proposed FSRU falls between mainland Ventura County and the Channel Islands, the USEPA had discretion in determining which regulatory requirements would be applied to the FSRU. The USEPA determined that it would regulate and permit the FSRU in the same manner as emission sources in the Federal attainment area, i.e., in the same manner as sources on the Channel Islands. Federal actions in the Channel Islands are not subject to General Conformity because the region is not classified as a Federal nonattainment or maintenance area. Therefore, the USEPA made a preliminary determination that the proposed issuance of a permit under the Deepwater Port Act and any other Federal action directly associated with FSRU operations would not be subject to the General Conformity Rule. Thus, any emissions related to FSRU installation and operations (including support vessel operation) in attainment, maintenance, or nonattainment areas would not be subject to General Conformity.

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The USEPA has further concluded that portions of the Pacific Ocean that are beyond the federally recognized limit of California (i.e., in Federal waters) have not been designated with respect to NAAQS. Since Federal waters have not been designated under 40 CFR 81, any emissions generated from Project-related operations and construction that occur in Federal waters are not subject to the General Conformity Rule.

Project-related construction activities, such as the installation of offshore and onshore pipelines, would also require Federal actions (e.g., licenses, permits, and/or approvals from Federal agencies) that could be applicable to the General Conformity Rule. Since Ventura County and Los Angeles County (within the South Coast Air Basin) are considered as nonattainment or maintenance areas for at least one criteria pollutant, direct and indirect emissions associated with Federal actions taken for Project construction in Ventura and Los Angeles Counties (including Ventura County waters) were analyzed to determine applicability to the General Conformity Rule.

effect of this subsection is to establish a system of deepwater port regulation similar to that governing the operation of structures erected on the Outer Continental Shelf in accordance with the Outer Continental Shelf Lands Act.” For this reason, § 1518 (b) of the DPA uses the exact same language from OCSLA in directing the application of state and local law to deepwater ports located in federal waters. 43 USC § 1333(a)(2)(A). In this case, state and federal law both designate the applicable onshore area as non-attainment for ozone.

Fifth, as EPA has previously stated, Section 1518(a) of the DPA:

extends the Constitution and laws of the United States ‘to deepwater ports . . . and to activities connected, associated, or potentially interfering with the use or operation of any such port, in the same manner as if such port were an area of exclusive Federal jurisdiction located within a State.’ Section 118 of the Clean Air Act speaks directly to the question of how an area of exclusive Federal jurisdiction located within a State is to be treated for purposes of the Clean Air Act: the state implementation plan is to apply.”

Rios 2004c at 5.

Thus, for the Coast Guard to ignore the portion of Cabrillo Port in federal waters from the General Conformity rule undermines the CAA, the DPA and Congress’s express intentions to account for emissions from federal projects located in federal waters that may affect onshore air quality. The Coast Guard cannot assure that its actions in licensing Cabrillo Port will not cause SIP violations if it fails to analyze the part of the project located in federal waters – which encompasses the bulk of the NOx and ROC emissions that will blow onshore to the ozone non-attainment areas.

iii. *Ventura County Nonattainment Rules for Ozone Precursors Apply to Cabrillo Port*

1. Federal law designates the nearest onshore area of Ventura County as nonattainment for ozone.

Cabrillo Port will be located approximately 14 miles offshore of Ventura County in federal waters. Ventura County is located in the South Central Coast Air Basin. 17 CCR § 60103. The boundaries of Ventura County include two offshore Channel Islands: Anacapa Island and San Nicolas Island. Cal. Gov. Code § 23156. All of Ventura County, *including the Islands*, is designated as non-attainment for ozone for not meeting California’s air quality standards. 17 C.C.R. §§ 60201 and 60205. Although Ventura County is still designated non-attainment for ozone under federal standards promulgated by EPA, Anacapa and San Nicolas Islands are inexplicably designated as “unclassifiable/attainment” for each pollutant.<sup>6</sup> 40 C.F.R. § 80.305.

<sup>6</sup> An area is only designated as “unclassifiable” when the data do not support a designation of attainment or non-attainment. As identified and analyzed in Camille

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For purposes of the General Conformity Rule, nonattainment means an area designated as nonattainment under Section 107 of the Clean Air Act and described in 40 CFR 81. The nonattainment designations listed under 17 CCR 60201-60205 are not applicable to the General Conformity Rule.

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As discussed above, federal law dictates that the Cabrillo Port Project be regulated as if it were physically located in the onshore, federally-designated, nonattainment area. Even if this was not the case, for purposes of regulating a deepwater port, such as the Cabrillo Port, Congress explicitly intended the state's designation of Ventura County's non-attainment status for ozone, which includes the Channel Islands, to control. Section 1518 (b) of the DPA "prevents the Deepwater Port Act from relieving, exempting or immunizing any person from requirements imposed by State or local law or regulation. In addition, States are not precluded from imposing more stringent environmental or safety regulations." Section 19 (b) of Senate Report 93-1217 (Oct. 2, 1974).

2. Cabrillo Port is not exempt from regulation as a New Source in a nonattainment area under VCAPCD Local Rules and regardless these rules do not change the state ozone nonattainment designation for Ventura County, including Anacapa and San Nicolas Islands.

VCAPCD Local New Source Review ("NSR") Rule 26 applies to the Cabrillo Port Project because state and federal law require the port to be regulated as if it were located in the onshore non-attainment area of Ventura County. This was EPA's position for almost two years when it was reviewing Cabrillo Port's significant air quality impacts and permit application. McLeod 2004; Rios 2004a; Rios 2004b; Rios 2004c. EPA wrote several thoroughly researched legal briefs defending this position to the applicant and the White House. *Id.* In fact, in a letter addressed to the White House, EPA concluded that its determination to apply the onshore non-attainment rules to Cabrillo Port "represents EPA nationwide policy on implementation of the Deepwater Port Act (DPA) and the Clean Air Act (CAA) with respect to offshore facilities." McLeod 2004.

Inexplicably, and after considerable lobbying from the applicant, EPA changed its position without any cognitive legal explanation in June 2005. Zimpfer 2005; Kirby 2004; Meheen 2004; Umenhofer 2004. EPA's change in position makes no sense in light of the fact that the emissions from the Cabrillo Port Project will be transported onshore. Sears 2006 at 4-10. Despite rejecting BHP Billiton's plethora of legal briefs on this issue, EPA cited to a VCAPCD exemption from New Source Review for "any emissions unit located on San Nicolas Island or Anacapa Island." VCAPCD Rule 26.3 – New Source Review – Exemptions; Rios 2004c. This exemption is simply inapplicable to Cabrillo Port because it is not located on either of these islands as required by the plain language of the exemption.

EPA originally rejected the applicability of this exemption on several relevant grounds: 1) the inappropriateness of permitting Cabrillo Port as if it were located within a

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Sears' Report, the data collected on Anacapa Island before the air monitor was removed in 1992 reported several national and state air quality violations. Sears 2006 at 12-14.

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The USEPA has jurisdiction to administer air quality regulations and required air permits for applicable Project activities that occur outside of the boundaries of California counties, including operation of the FSRU.

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National Park which encompasses Anacapa Island, or as if it were part of the Naval Base which encompasses San Nicolas island; 2) the types of sources located on these islands and the unlikelihood of any new major sources being located on the islands; 3) the reasons why VCAPCD exempted sources on the island did not encompass Cabrillo Port; 4) the location of the islands in comparison to the port since Cabrillo Port is several miles closer to the onshore area than it is to either island; and 5) the reasons behind Congress requiring offsets for OCS sources within 25 miles of an onshore non-attainment area. None of these have changed today to provide a basis for the Coast Guard to stray from EPA's original determination that the Cabrillo Port Project should be regulated as if it were in a nonattainment area. McLeod 2004.

Despite EPA's June 29, 2005 arbitrary change in position and political determination regarding the air permit, the Coast Guard is not relieved of its obligation to regulate Cabrillo Port in a manner consistent with both the CAA and the DPA. These statutes require that Cabrillo Port's emissions from operations and construction in federal waters be regarded as occurring in a non-attainment area for ozone precursors, as designated by both federal and state law. 40 C.F.R. § 81.305; 17 C.C.R. §§ 60201 and 60205.

Moreover, even if VCAPCD's Rule 26.3 exemption were to apply to the Cabrillo Port project it does not relieve the Coast Guard of its responsibility to apply the General Conformity Rule to the offshore components of the project in federal waters. VCAPCD Rule 26.3 allows sources located on the islands to be exempt from offsets; however, it does not change the state's designation that those sources are still located in a non-attainment area for ozone pre-cursors. VCAPCD Local Rule does not re-designate or dispute that the islands are still located in a non-attainment area for ozone pre-cursors per the state law. It only addresses how those sources should be permitted, an issue that is not before the Coast Guard at this time.

Thus, for purposes of the Coast Guard's statutory responsibilities under the DPA and the CAA, excluding the offshore components of the Cabrillo Port Project from evaluation in the Draft Conformity Analysis is flawed since Cabrillo Port is required to be treated as if it were in a non-attainment area per federal and state law and VCAPCD's local rules do not change that designation.

**b. Federal Law Requires Cabrillo Port Project Activities To Conform To Onshore Nonattainment Area SIPs**

Even assuming that the FSRU and its associated vessels are properly characterized as part of an attainment/unclassifiable area, the CAA still requires the Coast Guard to evaluate whether the Cabrillo Port Project activities will conform to SIP provisions for *any* nonattainment area that may be impacted by project activities, not just the area in which the emissions are initially generated.

The plain language of CAA Section 176(c) imposes the broad mandate that "No department, agency, or instrumentality of the Federal Government shall engage in,

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For purposes of the General Conformity Rule, nonattainment means an area designated as nonattainment under Section 107 of the Clean Air Act and described in 40 CFR 81. The nonattainment designations listed under 17 CCR 60201-60205 are not applicable to the General Conformity Rule.

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The General Conformity Rule was promulgated pursuant to Section 176(c)(1)(B) of the Clean Air Act. In the public notice for the final General Conformity (58 FR 63214), the summary of the rule states that the criteria and procedures established in this rule apply only in areas that are nonattainment or maintenance with respect to any of the criteria pollutants. Accordingly, the applicability of Federal Actions as stated in the General Conformity Rule (40 CFR 93.153 (b)) is based on a comparison of "the total direct and indirect emissions in nonattainment or maintenance area caused by a Federal action" to threshold levels. Emissions projected to occur in attainment areas, unclassifiable areas, or areas not designated are not included in the applicability criteria of the General Conformity Rule.

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support in any way or provide financial assistance for, license or permit, or approve, an activity *which does not conform to an implementation plan* after it has been approved or promulgated under section 7410 of this title” (emphasis added). 42 U.S.C. § 7506(c)(1). Conformity is defined as:

- (A) conformity to *an implementation plan’s* purpose of eliminating or reducing the severity and number of violations of the [NAAQS] and achieving expeditious attainment of such standards; and
- (B) that such activities will not –
  - i. cause or contribute to any new violation of any standard in *any area*;
  - ii. increase the frequency or severity of any existing violation of any standard in *any area*;
  - iii. or delay timely attainment of any standard or any required interim emission reductions or other milestones in *any area*.

42 U.S.C. § 7506(c)(1)(A)-(B) (emphasis added). Thus, the legal standard of CAA Section 176(c) conformity is not based on the location of the activities, but on whether the activities will conform to “an” implementation plan’s requirements for “any” area. If project activities may impact SIP provisions for areas other than where the project is located, those activities must be evaluated for conformity with the SIP.

Section 176(c)(5) does clarify that “any” area means a nonattainment or maintenance area, and thus does not include areas initially designated “attainment.” 42 U.S.C. § 7506(c)(5). Nonetheless, the plain reading of Section 176(c) is that activities must conform to “an” implementation plan’s requirements for “any” nonattainment or maintenance area, not simply to the SIP requirements for the area in which the activities are located. Thus, nothing in Section 176(c)(5) or anywhere else in Section 176 limits the scope of the conformity determination to the area in which the activities are located.

Although it is not necessary to resort to legislative history under these circumstances, the legislative history for Section 176(c) only affirms this plain reading.<sup>7</sup> CAA Section 176(c) was amended in 1990 for the explicit purpose of ensuring that:

Federal agencies do not take or support actions which are in any way inconsistent with the effort to achieve [the National Ambient Air Quality Standards] or which

<sup>7</sup> Chevron, U.S.A. v. Natural Resources Defense Council, 467 U.S. 837, 842-43 (1984) (“If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.”).

fail to take advantage of opportunities to help in the effort to achieve [the National Ambient Air Quality Standards].

H. Rep. 101-490, 101<sup>st</sup> Cong., 2d Sess. 222 (1990). In discussing these amendments, the Senate Report notes that:

The purpose of the conformity language is to assure that before in any way participating in an activity, a Federal agency must find that the activity does not cause or contribute to violations of an ambient standard in any area, does not increase the severity or frequency of existing violations, and does not delay progress in achieving ambient standards in any nonattainment area . . . .

S. Rep. 101-228, 101<sup>st</sup> Cong., 1st Sess. 28 (1990). These statements highlight Congress' intent that federal agencies would consider the full scope of project impacts on air quality goals. Ignoring known impacts from a project simply because the project is located in a separate area is utterly at odds with Congress' broad intention to ensure that federal actions do not interfere with the ability of "any nonattainment area" to achieve the National Ambient Air Quality Standards. *Id.*

c. Offshore Emissions Will Be Transported To Ventura County And Los Angeles County Nonattainment Areas

The absurdity of the Coast Guard's narrow legal interpretation of CAA Section 176 is precisely highlighted by the circumstances of the Cabrillo Port Project. Although the bulk of project activities will take place offshore, the emissions generated by these activities will be received onshore and will significantly increase the pollution burden in the South Central and South Coast Air basins. As acknowledged in the California State Lands Commission's Revised Draft Environmental Impact Report ("Revised DEIR"), emissions of NOx and ROC generated from construction and operation of FSRU equipment and project vessels may contribute to ambient ozone impacts in onshore areas downwind of the project location. CSLC 2006 at 4.6-33 – 4.6-35. The Revised DEIR similarly concludes that the dispersion of air pollutants (other than ozone precursors) from the FSRU and project vessels "would cause an increase in the ambient air concentrations of each pollutant at downwind locations in the Pacific Ocean and along the coast of California." CSLC 2006 at 4.6-38. The Revised DEIR identifies a range of projected impacts from project emissions, but notably, ozone precursor emissions from project related vessels are identified as a "Class I" impact for onshore areas – i.e., a significant impact that cannot be mitigated.<sup>8</sup> *Id.* Both Ventura County and Los Angeles County are designated "nonattainment" for ozone.<sup>9</sup> CSLC 2006 at 4.6-6.

<sup>8</sup> The Revised DEIR separates FSRU emissions (Class II impact) from vessel emissions (Class I impact).

<sup>9</sup> Ventura County is "moderate" nonattainment. Los Angeles County is "severe" nonattainment. Revised DEIR at 4.6-6.

GC001-16  
Continued

GC001-16 Continued

GC001-17

The revised General Conformity analysis concludes that all applicable Project emissions would be less than de minimis thresholds in both Ventura and Los Angeles Counties and, therefore, not subject to the General Conformity Rule. This conclusion does not conflict with any of the conclusions regarding potential air quality impacts to Ventura and Los Angeles Counties outlined in the March 2006 Revised Draft EIR.

GC001-17

Ms. Camille Sears, an air modeling expert with over 25 years of experience in her profession, has reviewed the Cabrillo Port Project and concluded that the Draft Conformity Determination improperly ignores the impacts from offshore project emissions on the onshore nonattainment areas. Sears 2006 at 4-10. Ms. Sears identifies and describes multiple published, peer reviewed studies and meteorological analyses, all of which demonstrate that “offshore emissions in the Project area are part of the onshore ozone nonattainment problem.” *Id.* at 5-10. Ms. Sears’ own analysis, based on existing wind flow data, corroborates these studies, and demonstrates that Cabrillo Port Project emissions will blow onshore into areas in Santa Barbara County, Ventura County, and Los Angeles County “roughly 80 percent of the time.” Sears 2006 at 8.

Ms. Sears’ findings are consistent with the SCAQMD’s request that the general conformity analysis include “ship activities and their associated emissions” to evaluate the potential impacts of such emissions on the South Coast Air Basin. Whynot 2005. The California Air Resources Board (“CARB”) has also concluded that offshore activities related to the Cabrillo Port Project, particularly the operation of marine vessels, will impact onshore nonattainment areas. Scheible 2006 (“... unmitigated marine vessel emissions that are emitted within California Coastal Waters would add to the air pollution burden in California and should be mitigated.”).

More generally, as Ms. Sears notes, CARB has concluded, based on extensive data (including island, shipboard, and coastal meteorological observations), that emissions within a certain distance off the California Coast (ranging coast-wide from 24 NM to 90 NM, or 27 to 102 miles) “are likely to be transported ashore and affect the air quality in California’s coastal air basins, particularly during the summer.” Sears 2006 at 9; see also, Scheible 2006 at Appendix B/Attachment, fn 1. CARB refers to this area as “California Coastal Waters.” *Id.* Recently, CARB has proposed a rule requiring marine vessels operating within a subset of California Coastal Waters (within 24 nautical miles of the California Coastline) to reduce the onshore impacts of marine vessel diesel emissions. CARB 2005. In support of this proposal, CARB states that:

The transport of air pollution over long distances and between air basins has been well established. The emissions from ocean-going vessels can travel great distances and numerous studies have shown local, regional, and global impacts on air quality . . . . Several studies support ARB staffs [sic] conclusion that emissions from ocean-going vessels released offshore the California Coast can impact onshore air quality.

*Id.* at IV-7.

Moreover, Congress itself recognized the significant impact offshore sources can have on coastal air quality when, at the same time it amended the Clean Air Act to tighten the general conformity requirements, it also directed EPA to control sources of pollution occurring offshore on the outer-continental shelf (“OCS”). See 42 U.S.C. § 7627. These requirements apply to OCS sources “within 25 miles of the seaward boundary” of the Pacific coast. 42 U.S.C. § 7627(a)(1). In enacting these requirements, Congress was

GC001-17  
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GC001-17 Continued

motivated by “the fact that OCS air pollution is causing or contributing to the violation of Federal and State ambient air quality standards in coastal regions.” S. Rep. 101-228, 101<sup>st</sup> Cong., 1st Sess. 28 (1990). Specifically, Congress noted that:

The magnitude of OCS pollution and the fact that the prevailing winds bring much of this pollution onshore has led the Environmental Protection Agency to express concern about the onshore air quality impacts from OCS development, along the coasts of both California and the Gulf States.

Id.<sup>10</sup>

This information demonstrates that there is no valid basis to dispute that Cabrillo Port Project ozone precursor emissions generated offshore will be transported to nearby ozone nonattainment areas, particularly in Ventura County and Los Angeles County.<sup>11</sup> Therefore, they must be evaluated for conformity with Ventura County and Los Angeles County SIPs.

The potential impacts of additional ozone precursor emissions on the nonattainment status of Ventura County and Los Angeles County cannot be downplayed. Although both areas’ ozone levels have improved since the early 1990s, they still have much to accomplish to achieve their air quality goals. See, e.g., SCAQMD 2003 at ES-4 (the South Coast Air Basin “still exceeds the federal 1-hour standard more frequently than any other location in the U.S.”). The failure of these areas to achieve ozone air quality standards means continuing severe health effects for the general population, and particularly for “children and adults with preexisting lung disease such as asthma and chronic pulmonary lung disease.” Id. Those who exercise outdoors are also highly susceptible to the adverse effects of ozone. Id. Nonattainment for ozone also means continued serious impacts to agriculture:

Ozone probably causes more injury to vegetation than any other air pollutant. According to the California Department of Food and Agriculture, ozone causes 80-90 percent of the air pollution related agricultural losses in California.

VCAPCD 1994 at 1-6 – 1-7.

As discussed above, the ozone precursor emissions from the Cabrillo Port Project will reach onshore areas. These emissions will “contribute to the onshore ozone

<sup>10</sup> EPA has also more recently acknowledged that offshore emissions can have significant impacts for onshore ambient air quality. Rios 2004c, fn 12.

<sup>11</sup> BHP Billiton concludes that “there is insignificant potential for the proposed Project to impact the onshore ozone nonattainment area.” Sears 2006 at 9. However, this conclusion is based on a model that does not consider “photochemical reactions and other parameters necessary to assess ozone impacts.” Id. Their conclusion is thus unsupportable and otherwise flatly contradicted by the multiple studies and meteorological assessments demonstrating that offshore NOx emissions do blow onshore. Id.

GC001-17  
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GC001-17 Continued

nonattainment problem.” Sears 2006 at 7. These emissions are not included in the applicable SIPs. Sears 2006 at 3. Therefore, the offshore activities of the Cabrillo Port Project cannot be deemed to conform to the nonattainment SIP provisions for either Ventura County or Los Angeles County without the applicant obtaining offsets or some other form of mitigation. However, since the Coast Guard has completely failed to provide any information or analysis regarding offshore Cabrillo Port Project emissions, it is difficult for the public to provide any meaningful input on the matter. For this reason, the Draft Conformity Determination must be revised to include consideration of the FSRU and vessel emissions and then re-circulated for an additional round of public comment. 40 C.F.R. § 51.856; Ober v. U.S. EPA, 84 F.3d 304, 313-316 (9th Cir. 1996).

#### V. Increased Emissions From Sources Using Cabrillo Port Natural Gas

The importation of “hot gas” through the Cabrillo Port Project may cause additional and unaccounted SIP violations that the Coast Guard must consider in the Draft Conformity Determination.

The Cabrillo Port Project has not committed to importing gas from any specific source. CSLC 2006 at 4.6-24. This is important since the gas quality dictates its potential to emit NOx. According to testing conducted by the South Coast Air Quality Management District, “the combustion of natural gas with uncharacteristically higher heating values could increase stationary source NOx emissions by greater than 20%. . .” CSLC 2006 at 4.6-24. This uncertainty in the quality of the gas expected to be imported may cause the Cabrillo Port Project emissions to cause or contribute to a SIP violation in two ways.

First, BHP Billiton’s NOx emission estimates are all based on an unfounded assumption that it will only import gas that has a heating value lower than 1,360 on the Wobbe index, such as that that could be supplied by the Scarborough field in Australia. Revised DEIR, 4.6-24. Gas that is lower than 1,360 on the Wobbe index results in lower NOx emissions. BHP Billiton intends to run its vessels and crew and supply boats on the natural gas that it imports. If Cabrillo Port imports “hot gas” (higher than 1,360) from another region such as Indonesia, then its vessels, crew and supply boats would possibly be burning natural gas that has 20% or higher NOx emissions than predicted in the Revised DEIR. Sears 2006 at 10. Since the Revised DEIR admits that NOx emissions from Cabrillo Port could contribute to ozone impacts in areas located downwind of the project, an increase in NOx emissions caused from using hot gas as part of project operations could cause or contribute to a SIP violation. Id.

Second, the end use of imported hot gas from Cabrillo Port in both residential and non-residential natural gas fired equipment could release increased NOx emissions that may cause air quality violations and are not accounted for in the SIP budget. Id. These impacts could occur in the ozone non-attainment area in Ventura County, or any other ozone non-attainment areas that would import gas from Cabrillo Port. Id. This is a concern that SCAQMD shares regarding the importation of LNG from Cabrillo Port. SCAQMD 2005; Liu 2006.

GC001-17  
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GC001-17 Continued

GC001-18

Pursuant to 40 CFR 93.153(b), applicability to the General Conformity Rule is based on a comparison of direct and indirect emissions in a nonattainment area or maintenance area to prescribed de minimis thresholds. Pursuant to 40 CFR 93.152, direct emissions are caused or initiated by the Federal action and occur at the same time and place as the action. Pursuant to 40 CFR 93.152, indirect emissions may occur later in time or be further removed in distance from the action as long as the Federal agency can practicably control and will maintain control over due to a continuing program responsibility of the Federal agency. Under these definitions, the emissions that result from the “end-use” of imported natural gas are not considered as direct or indirect emissions, and thus, not subject to the General Conformity Rule.

GC001-18

These potential increases in NOx emissions have not been analyzed in the Draft Conformity Determination. Sears 2006 at 10. However, the General Conformity Rules requires the Coast Guard to consider the full impacts of the Cabrillo Port project on the SIP. In order for the Coast Guard to do this it must calculate and disclose a range of NOx emissions that could occur if Cabrillo Port imports hot gas from areas outside the Scarborough field in Australia. Currently, EPA has not obtained a commitment from the applicant in the air permit that it would limit the heat content of the gas imported to that used as a basis for its NOx emission calculations in the Revised DEIR and the air permit application. Thus, the Coast Guard has no basis to exclude from its Draft Conformity Determination an analysis of the potential impacts that imported hot gas from Cabrillo Port will have on the SIP.

## VI. Conclusion

In sum, although EDC agrees with the Coast Guard's conclusion that construction related emissions in Los Angeles County do not conform to the most recent EPA approved SIP for that area, we find the Draft Conformity Determination to be wholly inadequate in carrying out CAA Section 176(c)'s mandate to ensure the Cabrillo Port Project will not interfere with Ventura County and Los Angeles County efforts to achieve federal air quality standards.

We disagree with the Coast Guard's emissions estimates for construction related emissions in Los Angeles County and Ventura County. For emissions in Los Angeles County, the Coast Guard has underestimated the amount of mitigations or offsets that are necessary to demonstrate conformity. For Ventura County, the Coast Guard has erroneously concluded that construction emissions will not trigger general conformity review.

The Coast Guard has also simply ignored the full scope of emissions resulting from the Cabrillo Port Project. The Draft Conformity Determination is seriously flawed because it does not identify and evaluate emissions from offshore construction and operation. These emissions comprise the bulk of emissions associated with this project, and although they are initially generated offshore, they will blow onshore and significantly increase the pollution burden in Ventura County and Los Angeles County. The Coast Guard also fails to consider increased NOx emissions that may result from residential and industrial sources that utilize natural gas imported via the Cabrillo Port. These emissions will interfere with Ventura County and Los Angeles County efforts to attain federal air quality standards for ozone.

A full accounting and review of the Cabrillo Port Project emissions will demonstrate that the project's construction and operation does not conform to the SIPs for Ventura County and Los Angeles County, both of which are designated "non-attainment" for ozone. The Draft Conformity Determination must be revised to address the identified inadequacies, which are critical to the Coast Guard's final General Conformity decision, and ultimately to the ability of Ventura and Los Angeles County to

## GC001-18 Continued

GC001-18  
Continued

### GC001-19

The General Conformity Rule was promulgated pursuant to Section 176(c)(1)(B) of the Clean Air Act. In the public notice for the final General Conformity (58 FR 63214), the summary of the rule states that the criteria and procedures established in this rule apply only in areas that are nonattainment or maintenance with respect to any of the criteria pollutants. Accordingly, the applicability of Federal Actions as stated in the General Conformity Rule (40 CFR 93.153 (b)) is based on a comparison of "the total direct and indirect emissions in nonattainment or maintenance area caused by a Federal action" to threshold levels. Emissions projected to occur in attainment areas, unclassifiable areas, or areas not designated are not included in the applicability criteria of the General Conformity Rule.

GC001-19

### GC001-20

The emissions analyses are derived from and consistent with historic operation and construction schedules of comparable projects that incorporate typical deviations from normal conditions.

GC001-20

### GC001-21

The General Conformity Rule was promulgated pursuant to Section 176(c)(1)(B) of the Clean Air Act. In the public notice for the final General Conformity (58 FR 63214), the summary of the rule states that the criteria and procedures established in this rule apply only in areas that are nonattainment or maintenance with respect to any of the criteria pollutants. Accordingly, the applicability of Federal Actions as stated in the General Conformity Rule (40 CFR 93.153 (b)) is based on a comparison of "the total direct and indirect emissions in nonattainment or maintenance area caused by a Federal action" to threshold levels. Emissions projected to occur in attainment areas, unclassifiable areas, or areas not designated are not included in the applicability criteria of the General Conformity Rule.

GC001-21

overcome their ozone problems. The revised Draft conformity determination must also be re-circulated for an additional round of public comment.

GC001-21  
Continued

GC001-21 Continued

Sincerely,



Karen M. Kraus  
Staff Attorney



Alicia I. Roessler  
Staff Attorney

Attachments

### LIST OF ATTACHMENTS

California Air Resources Board (CARB). 2005. Initial Statement of Reasons for Proposed Regulations to Reduce Emissions from Auxiliary Diesel Engines and Diesel-Electric Engines Operated on Ocean-Going Vessels within California Waters and 24 Nautical Miles of the California Baseline. December 8.

California State Lands Commission (CSLC). 2006. Revised Draft Environmental Impact Report for the Cabrillo Port Liquefied Natural Gas Deepwater Port, Vol. 1, Section 4.6. March.

Kirby, Steven Evans (Hollister & Brace). 2004. Letter to Gerardo C. Rios (Chief, Permits Office, Air Division, EPA). June 1.

Liu, Chung S. (Deputy Executive Officer, Science & Technology Advancement, SCAQMD). 2006. Letter to Michael H. Scheible (Deputy Executive Officer, California Air Resources Board). February 9.

McLeod, Barbara (Senior Special Assistant, Environmental Protection Agency). 2004. Letter to Letter to Steve Meheen (Project Manager, BHP Billiton LNG International Inc.). July 7.

Meheen, Steven R. (Project Manager, BHP Billiton). 2004. Email to Bob Middleton & Jeff Cohen (White House Task Force on Energy Project Streamlining). May 24.

Prescott, M.A. (USCG). 2006. Letter to Karen M. Kraus (Environmental Defense Center) Re: General Conformity Information Regarding Cabrillo Port LNG Project. March 22.

Rios, Gerardo C. (Chief, Permits Office, Air Division, Environmental Protection Agency). 2004a. Letter to Steve Meheen (Project Manager, BHP Billiton LNG International Inc.). April 5.

Rios, Gerardo C. (Chief, Permits Office, Air Division, Environmental Protection Agency). 2004b. Letter to Commander Mark Prescott (Acting Chief, U.S. Coast Guard). June 10.

Rios, Gerardo C. (Chief, Permits Office, Air Division, Environmental Protection Agency). 2004c. Letter to Steve Meheen (Project Manager, BHP Billiton LNG International Inc.). June 29.

Scheible, Michael H. (Deputy Executive Officer, California Air Resources Board). 2006. Letter to Renee Klimczak (President, BHP Billiton LNG International Inc.). January 31.

Sears, Camille. 2006. Letter to Docket Management Facility (U.S. Department of Transportation) Re: Cabrillo Port Liquefied Natural Gas Deepwater Port Project Draft Conformity Determination Comments. April 13.

South Coast Air Quality Management District (SCAQMD). 2003. 2003 Air Quality Management Plan, Executive Summary.

South Coast Air Quality Management District (SCAQMD). 2005. Responsive Testimony of South Coast Air Quality Management District to Testimony and Proposal of San Diego Gas and Electric Company and Southern California Gas Company. September 23.

Umenhofer, Tom (Entrix). 2004. E-Mail Memorandum to Mike Villegas (Air Pollution Control Officer, VCAPCD). June 21.

Ventura County Air Pollution Control District (VCAPCD). 1994. Ventura County 1994 Air Quality Management Plan, Ch. 1.

Whynot, J. (Planning and Rules Manager, South Coast Air Quality Management District). 2005. Letter to Paul J. Van Kerkhove, P.E. (Ecology and Environment, Inc.). March 9.

Zimpfer, Amy K. (Associate Director, Air Division, Environmental Protection Agency). 2005. Letter to Commander Mark Prescott (Chief, U.S. Coast Guard). June 29.

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April 13, 2006

Docket Management Facility  
 U.S. Department of Transportation  
 Room PL-401, 400 Seventh Street SW.  
 Washington, DC, 20590-0001

Re: Docket No. USCG-2004-16877  
 Cabrillo Port Liquefied Natural Gas Deepwater Port Project  
 Draft Conformity Determination Comments

**I. Introduction**

I have reviewed and prepared comments on the Cabrillo Port, Liquefied Natural Gas Deepwater Port Project, Draft General Conformity Determination (Draft Conformity Determination), dated March 2006. In particular, I focused on the construction, operation, marine vessel, and Project-associated emissions of ozone precursor pollutants that should have been included in the Draft Conformity Determination. Because the Draft Conformity Determination is based on faulty assumptions, incorrect data, and spurious exemptions, the nonattainment SIP conformity conclusions presented in the document are flawed.

The Draft Conformity Determination must include all Project ozone precursor emissions that have the potential to interfere with the local nonattainment SIPs, including onshore and offshore construction, operation of the FSRU, marine vessel traffic within California Coastal Waters, and any other Project-associated emission increases, such as those that may be caused by the higher heat content of the natural gas supplied to end-users. The construction and operational emissions from the proposed Project were not foreseen and are not included in the State Implementation Plans (SIPs) for the South Coast Air Quality Management District (SCAQMD) or the Ventura County Air Pollution Control District (VCAPCD).

Because of unjustifiable offshore emission exemptions, the Draft Conformity Determination limited its analysis to construction emissions within the boundaries of the SCAQMD and the VCAPCD. The Draft Conformity Determination is clearly inadequate – it ignores the regional nature of ozone and the onshore impacts caused by the offshore emissions. The Draft Conformity Determination does not provide a meaningful analysis of whether the proposed Project is in conformity with the applicable ozone nonattainment SIPs.

**II. Qualifications**

My comments on the Draft Conformity Determination, presented below, are based on over 25 years of professional experience performing air quality and toxics exposure analyses. I was the senior air quality modeler and air toxics program coordinator for the Santa Barbara County Air Pollution Control District (SBAPCD), where I worked for approximately nine years. At the SBAPCD, I was also responsible for air quality modeling analyses used for determining the effectiveness of NO<sub>x</sub> and

GC003-1

In March 2006, the USCG and MARAD solicited public input on a Draft General Conformity Determination, which concluded that NO<sub>x</sub> emissions generated from Project construction activities in Los Angeles County were subject to the General Conformity Rule. All other Project-related emissions were determined not to be subject to the General Conformity Rule. Subsequent to the issuance of the Conformity Determination, BHPB provided a written commitment that all onshore pipeline construction equipment would, to the extent possible, utilize engines compliant with USEPA Tier 2, 3, or 4 non-road engine standards with Tier 2 being the minimum standard for any engine.

Project emissions were then reanalyzed to assess the potential emission reductions associated with the stated commitment and to reassess the applicability of the General Conformity Rule. The revised General Conformity analysis concluded that all applicable Project emissions would be less than *de minimis* thresholds in both Ventura and Los Angeles Counties and, therefore, not subject to the General Conformity Rule. Based on this conclusion, the USCG and MARAD will not finalize the Draft General Conformity Determination.

GC003-1

Section 4.6.1.3 and Section 4.6.2 contain revised Project emission estimates and a revised discussion of the applicability of the General Conformity Rule to the Project, respectively. Appendix G4 contains a copy of the revised General Conformity analysis.

Draft Conformity Determination Comments  
April 13, 2006  
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ROC control measures on ozone formation, and the resultant process of attaining ozone standards as part of the Santa Barbara County's Air Quality Attainment Plan (AQAP). I also managed the EIR process for the District's AQAP, and I participated in several extensive meteorological analyses in the Santa Barbara Channel.

I am experienced in calculating emissions from offshore sources, including marine vessels. I have performed many air dispersion modeling analyses to determine the onshore impacts from these offshore emissions, and I reviewed and commented on beta-versions of the Minerals Management Service OCD model. As the first regulatory agency user of OCD, I developed detailed instructions for applying the model, as well as for OCDCPM, a hybrid version of OCD that was used in Santa Barbara County for permitting many offshore and coastal sources of air emissions.<sup>1</sup> I sited approximately 30 meteorological and air quality monitoring stations throughout Santa Barbara County, with many of them positioned specifically to track onshore impacts from offshore platform and marine vessel emissions. I also maintained a meteorological monitoring station on Platform Hondo, giving me a unique perspective on winds in the offshore environment.

While at the SBAPCD, I co-developed the mathematical, computer-based model for predicting community exposures to toxic air pollutants that was distributed by CAPCOA, the California Air Pollution Control Officers' Association. These measurements of exposure are often called Health Risk Assessments. CAPCOA is a voluntary association of state and local government officials, largely engineers and scientists responsible for air pollution control in California. The computer model I co-developed (ACE2588) has been used by air districts throughout the state in evaluating AB 2588 submissions by facilities covered by the law, and used extensively by consultants who prepared AB 2588 submissions for the facilities. I provided technical support on using this model for over 10 years, until it was replaced with the California Air Resources Board (CARB) program, HARP. Recipients of this support included regulatory agencies, industrial sources, and consulting firms.

For the past 14 years I have been a private consultant, specializing in regulatory agency and litigation support. My clients include the California Attorney General's Office, the Los Angeles County District Attorney's Office, the California Office of Environmental Health Hazard Assessment, various air pollution control agencies, the California Air Pollution Control Officer's Association, and many private firms. I have prepared over 300 complete air toxics health risk assessments and over 1,000 air dispersion modeling analyses. I have successfully provided expert testimony in numerous Federal and State Court cases. My curriculum vitae is attached.

Following are my comments on the Draft Conformity Determination.

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<sup>1</sup> Santa Barbara County Air Pollution Control District, Authority to Construct Permit Processing Manual, Section 6.0, Air Quality Impact Analysis, October 20, 1987.

### III. The Draft Conformity Determination is Based on Flawed Methods and Assumptions, Each of Which Errs to the Side of Inadequate Air Quality Protection

In preparing the Draft Conformity Determination, the Coast Guard must comply with Section 176(c) of the Clean Air Act, which prohibits Federal entities from approving projects that do not conform to the SIP for the attainment and maintenance of the NAAQS.<sup>2</sup> Specifically, the Coast Guard must demonstrate that the Cabrillo Port Project emissions will meet the applicable criteria in 40 CFR 51.858. Generally, this requires a demonstration that project emissions are identified and accounted for in an applicable SIP. If they are not, mitigation or offsets must be identified in order to demonstrate SIP conformity.

GC003-2

The only Project emissions evaluated in the Draft Conformity Determination are those associated with pipeline construction in Los Angeles County. The construction emissions within Los Angeles County are calculated to be 27.4 tons per year, which slightly exceeds the general conformity threshold of 25 tons/year NO<sub>x</sub> in a serious nonattainment area. These emissions will require offsetting for the period of time that the construction activities will take place (a few months). These are the only emissions associated with the Project that the Draft Conformity Determination indicates will interfere with any applicable nonattainment SIP.

GC003-3

The Draft Conformity Determination fails to identify and evaluate any other Project emissions that would adversely affect air quality, as required by the Clean Air Act Section 176(c). This regulatory slight-of-hand is accomplished by assigning most of the Project emissions to attainment status areas. In other words, the Draft Conformity Determination does not address the air quality ramifications of any of the Project operational emissions. The same is true for most of the marine vessel and offshore construction emissions as well. The construction and operational emissions from the proposed Project were not foreseen and are not included in the State Implementation Plans (SIPs) for the South Coast Air Quality Management District (SCAQMD) or the Ventura County Air Pollution Control District (VCAPCD).

GC003-4

In the case of construction activities within the VCAPCD, the calculated emissions are 86.4% of the conformity determination level, which is 100 tons/year of NO<sub>x</sub> for a moderate nonattainment area. Here again, the Draft Conformity Determination finds that no conformity analysis is required, and therefore does not identify any mitigation or offset requirements. The Draft Conformity Determination, however, relies on optimistic and unverified assumptions used in calculating construction emissions. It is highly likely that construction NO<sub>x</sub> emissions within the VCAPCD would exceed the general conformity level of 100 tons/year.

GC003-5

The proposed Project will cause substantial increases in NO<sub>x</sub> and ROC emissions (precursors to ozone formation) from onshore and offshore construction, the FSRU, and marine vessels associated with the FSRU. Because of favorable interpretations (for the applicant), the only component subject to the Draft Conformity Determination are the onshore construction NO<sub>x</sub> emissions in Los Angeles

GC003-6

<sup>2</sup> <http://www.epa.gov/ttn/oarpg/genconformity.html>

#### GC003-2

The General Conformity Rule was promulgated pursuant to Section 176(c)(1)(B) of the Clean Air Act. In the public notice for the final General Conformity (58 FR 63214), the summary of the rule states that the criteria and procedures established in this rule apply only in areas that are nonattainment or maintenance with respect to any of the criteria pollutants. Accordingly, the applicability of Federal Actions as stated in the General Conformity Rule (40 CFR 93.153 (b)) is based on a comparison of "the total direct and indirect emissions in nonattainment or maintenance area caused by a Federal action" to threshold levels. Emissions projected to occur in attainment areas, unclassifiable areas, or areas not designated are not included in the applicability criteria of the General Conformity Rule.

#### GC003-3

In March 2006, the USCG and MARAD solicited public input on a Draft General Conformity Determination, which concluded that NO<sub>x</sub> emissions generated from Project construction activities in Los Angeles County were subject to the General Conformity Rule. All other Project-related emissions were determined not to be subject to the General Conformity Rule. Subsequent to the issuance of the Conformity Determination, BHPB provided a written commitment that all onshore pipeline construction equipment would, to the extent possible, utilize engines compliant with USEPA Tier 2, 3, or 4 non-road engine standards with Tier 2 being the minimum standard for any engine.

Project emissions were then reanalyzed to assess the potential emission reductions associated with the stated commitment and to reassess the applicability of the General Conformity Rule. The revised General Conformity analysis concluded that all applicable Project emissions would be less than *de minimis* thresholds in both Ventura and Los Angeles Counties and, therefore, not subject to the General Conformity Rule. Based on this conclusion, the USCG and MARAD will not finalize the Draft General Conformity Determination.

Section 4.6.1.3 and Section 4.6.2 contain revised Project emission estimates and a revised discussion of the applicability of the General Conformity Rule to the Project, respectively. Appendix G4 contains a copy of the revised General Conformity analysis.

#### GC003-4

Since the location proposed FSRU falls between mainland Ventura

County and the Channel Islands, the USEPA had discretion in determining which regulatory requirements would be applied to the FSRU. The USEPA determined that it would regulate and permit the FSRU in the same manner as emission sources in the Federal attainment area, i.e., in the same manner as sources on the Channel Islands. Federal actions in the Channel Islands are not subject to General Conformity because the region is not classified as a Federal nonattainment or maintenance area. Therefore, the USEPA made a preliminary determination that the proposed issuance of a permit under the Deepwater Port Act and any other Federal action directly associated with FSRU operations would not be subject to the General Conformity Rule. Thus, any emissions related to FSRU installation and operations (including support vessel operation) in attainment, maintenance, or nonattainment areas would not be subject to General Conformity.

The USEPA has further concluded that portions of the Pacific Ocean that are beyond the federally recognized limit of California (i.e., in Federal waters) have not been designated with respect to NAAQS. Since Federal waters have not been designated under 40 CFR 81, any emissions generated from Project-related operations and construction that occur in Federal waters are not subject to the General Conformity Rule.

Project-related construction activities, such as the installation of offshore and onshore pipelines, would also require Federal actions (e.g., licenses, permits, and/or approvals from Federal agencies) that could be applicable to the General Conformity Rule. Since Ventura County and Los Angeles County (within the South Coast Air Basin) are considered as nonattainment or maintenance areas for at least one criteria pollutant, direct and indirect emissions associated with Federal actions taken for Project construction in Ventura and Los Angeles Counties (including Ventura County waters) were analyzed to determine applicability to the General Conformity Rule.

#### GC003-5

The emissions analyses are derived from and consistent with historic operation and construction schedules of comparable projects that incorporate typical deviations from normal conditions.

#### GC003-6

The General Conformity Rule was promulgated pursuant to Section 176(c)(1)(B) of the Clean Air Act. In the public notice for the final General Conformity (58 FR 63214), the summary of the rule states that the criteria and procedures established in this rule apply only in areas that are nonattainment or maintenance with respect to any of

the criteria pollutants. Accordingly, the applicability of Federal Actions as stated in the General Conformity Rule (40 CFR 93.153 (b)) is based on a comparison of "the total direct and indirect emissions in nonattainment or maintenance area caused by a Federal action" to threshold levels. Emissions projected to occur in attainment areas, unclassifiable areas, or areas not designated are not included in the applicability criteria of the General Conformity Rule.

County. These emissions account for only about five percent of the construction, startup, and first year operational NO<sub>x</sub> emissions from the proposed Project.

In order for the Draft Conformity Determination to reach this favorable conclusion for BHP Billiton, a number of non-protective air quality assumptions had to fall into place. In summary, these assumptions include:

- The Project operational and construction emissions are divided among three adjacent and different ozone attainment/nonattainment planning areas. The Draft Conformity Determination never considers the cumulative effects of the total emissions;
- Operational and startup emissions from the FSRU were deemed to be in an ozone attainment area (Anacapa Island), and thus exempt from the Conformity Rule;
- Marine vessel emissions outside three nautical miles from shore were deemed to be in an ozone attainment area (federal waters), and thus exempt from the Conformity Rule;
- The FSRU operational and startup emissions, as well as marine vessel emissions in federal waters were not considered to be subject to the Draft Conformity Determination, even though they will clearly impact onshore air quality;
- The Revised DEIR identifies (but does not assess) the increased emissions caused by potentially higher heating value gas supplied by the Project. These are Project-associated emissions that must be part of the Draft Conformity Determination;
- The onshore construction emissions are likely underestimated due to optimistic schedules, equipment size, equipment rating, and equipment usage;
- The determination that Anacapa Island is in attainment for the Federal ozone standard is irrelevant (and questionable);
- The determination that the FSRU should be assessed using the attainment status for Anacapa Island is inappropriate given that the Project is considerably closer to coastal areas of mainland Ventura and Los Angeles counties.

In each instance where a calculation, assumption, or interpretation is called for, the Draft Conformity Determination leans towards the minimum possible mitigation requirements, or sidesteps them entirely. The flaws in each of these unsubstantiated assumptions, and the effect on the Draft Conformity Determination, are discussed in greater detail below.

#### IV. Emissions from the FSRU, Associated Marine Vessels, and Offshore Construction Interfere with the VCAPCD and SCAQMD Ozone SIPs

The Draft Conformity Determination exempts all Project emissions greater than three nautical miles from shore from having to conform to the onshore ozone SIPs. This exemption ignores the many thoroughly-documented meteorological analyses verifying that offshore emissions will come onshore and impact mainland air quality.

These Project offshore emissions will have an adverse impact on onshore air quality and must be meaningfully addressed in the Draft Conformity Determination. Ozone is a regional pollutant – it is not restricted to the limited area in which it is emitted. The entire ozone regulatory framework is

#### GC003-6 Continued

GC003-6  
Continued

GC003-7

GC003-8

GC003-9

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#### GC003-7

The General Conformity Rule was promulgated pursuant to Section 176(c)(1)(B) of the Clean Air Act. In the public notice for the final General Conformity (58 FR 63214), the summary of the rule states that the criteria and procedures established in this rule apply only in areas that are nonattainment or maintenance with respect to any of the criteria pollutants. Accordingly, the applicability of Federal Actions as stated in the General Conformity Rule (40 CFR 93.153 (b)) is based on a comparison of "the total direct and indirect emissions in nonattainment or maintenance area caused by a Federal action" to threshold levels. Emissions projected to occur in attainment areas, unclassifiable areas, or areas not designated are not included in the applicability criteria of the General Conformity Rule.

The General Conformity Rule does not include provisions for adding emissions in different nonattainment areas for comparison to de minimis thresholds.

#### GC003-8

The General Conformity Rule was promulgated pursuant to Section 176(c)(1)(B) of the Clean Air Act. In the public notice for the final General Conformity (58 FR 63214), the summary of the rule states that the criteria and procedures established in this rule apply only in areas that are nonattainment or maintenance with respect to any of the criteria pollutants. Accordingly, the applicability of Federal Actions as stated in the General Conformity Rule (40 CFR 93.153 (b)) is based on a comparison of "the total direct and indirect emissions in nonattainment or maintenance area caused by a Federal action" to threshold levels. Emissions projected to occur in attainment areas, unclassifiable areas, or areas not designated are not included in the applicability criteria of the General Conformity Rule.

#### GC003-9

The revised General Conformity Analysis clarifies that the USEPA made a preliminary determination that Federal waters have not been designated with respect to air quality attainment.

#### GC003-10

The General Conformity Rule was promulgated pursuant to Section 176(c)(1)(B) of the Clean Air Act. In the public notice for the final

General Conformity (58 FR 63214), the summary of the rule states that the criteria and procedures established in this rule apply only in areas that are nonattainment or maintenance with respect to any of the criteria pollutants. Accordingly, the applicability of Federal Actions as stated in the General Conformity Rule (40 CFR 93.153 (b)) is based on a comparison of "the total direct and indirect emissions in nonattainment or maintenance area caused by a Federal action" to threshold levels. Emissions projected to occur in attainment areas, unclassifiable areas, or areas not designated are not included in the applicability criteria of the General Conformity Rule.

#### GC003-11

As indicated in Section 4.6.2, the natural gas imported by the proposed Project would need to meet the requirements of Rule 30 and General Order 58-A of the California Public Utilities Commission (CPUC) or it could not be accepted for distribution by SoCalGas. Rule 30, as described, has specific requirements, including a heating value range.

Section 4.6.2 contains additional information on the regulatory setting affecting air quality and a revised discussion of the heating value of imported natural gas that incorporates the recent rulemaking by the CPUC. An analysis of the impacts of the CPUC rulemaking is beyond the scope of this document as required by NEPA and the CEQA.

#### GC003-12

The emissions analyses are derived from and consistent with historic operation and construction schedules of comparable projects that incorporate typical deviations from normal conditions.

#### GC003-13

USEPA is responsible for Federal air quality designations for regions within the U.S.

Since the location proposed FSRU falls between mainland Ventura County and the Channel Islands, USEPA had discretion in determining which regulatory requirements would be more appropriately applied to the FSRU. The USEPA determined that it would regulate and permit the FSRU in the same manner as emission sources in the Federal attainment area, i.e., in the same manner as sources on the Channel Islands. Federal actions in the Channel Islands are not subject to General Conformity because the region is not classified as a Federal nonattainment or maintenance area. Therefore, the USEPA made a preliminary determination that the proposed issuance of a permit under the Deepwater Port Act

and any other Federal action directly associated with FSRU operation would not be subject to the General Conformity Rule. Thus, any emissions related to FSRU installation and operations (including support vessel operation) in attainment, maintenance, or nonattainment areas would not be subject to General Conformity.

#### GC003-14

The General Conformity Rule was promulgated pursuant to Section 176(c)(1)(B) of the Clean Air Act. In the public notice for the final General Conformity (58 FR 63214), the summary of the rule states that the criteria and procedures established in this rule apply only in areas that are nonattainment or maintenance with respect to any of the criteria pollutants. Accordingly, the applicability of Federal Actions as stated in the General Conformity Rule (40 CFR 93.153 (b)) is based on a comparison of "the total direct and indirect emissions in nonattainment or maintenance area caused by a Federal action" to threshold levels. Emissions projected to occur in attainment areas, unclassifiable areas, or areas not designated are not included in the applicability criteria of the General Conformity Rule.

guided by this exceedingly clear principle. The effectiveness of control measures and emission reduction strategies are analyzed in regional, Eulerian photochemical models; The requirements for project offsets are expanded to the entire county or air basin in question; Emission inventories are calculated for these same regional impact areas.<sup>3</sup>

The Draft Conformity Determination sidesteps these established methods and tries to exempt the offshore emissions from having to conform to the area ozone SIPs. It disregards the well-established knowledge that offshore emissions will come onshore, and that they contribute as much as onshore pollutant sources to the ozone nonattainment problem.

In essence, the Draft Conformity Determination divides the Project operational and construction emissions among three adjacent and different ozone attainment/nonattainment planning areas, each with their own, non-overlapping requirements. The Draft Conformity Determination never considers the cumulative effects of the total emissions – in other words, the regional impacts of ozone precursor emissions are ignored.

There are many dozens of published and peer-reviewed accounts demonstrating that offshore emissions in the Project area are part of the onshore ozone nonattainment problem. Even 50 years ago, the *Southland Weather Handbook* presented wind streamlines showing that emissions from the Project location come directly onshore.<sup>4</sup> From this publication:

The main onshore flow of sea air fans out from Santa Monica to below San Diego, reaching the coast from west-southwest in Santa Monica Bay and from the west-northwest in San Diego County. Islands and hills cause minor variations in the larger pattern, such as the deflecting influence of the Palos Verdes Hills. On the coast northwest of Santa Monica to Santa Barbara the sea air reaches the coast from a more southerly quarter.<sup>5</sup>

Many more sophisticated meteorological analyses have been prepared as part of ozone studies and SIP modeling applications for the South Coast and South Central Coast Air Basins. These analyses focus on the meteorological conditions and trajectories associated with elevated ozone concentrations; however, the general onshore flow patterns are also presented. A few examples of these studies include:

- Various early (1981 and previous) tracer gas releases from offshore and nearshore locations to track onshore impacts and land/sea air recirculation.<sup>6,7</sup> These tracer gas studies included

<sup>3</sup> Tesche, T.W. and McNally, D.E., May 1991. Photochemical Modeling of Two 1984 SCCAMP Ozone Episodes. *Journal of Applied Meteorology*, 30,5,745-763.

<sup>4</sup> Aldrich, John H. and Myra Meadows. *Southland Weather Handbook*, 1956.

<sup>5</sup> Ibid, p.6.

<sup>6</sup> Shair, F.H., Application of Atmospheric Tracer Techniques to Determine the Transport and Dispersion Associated with the Land-Breeze Movement of Air Over the Los Angeles Coastal Zone, California Institute of Technology, prepared for CARB, December 2, 1982. The entire report can be downloaded from CARB at: <http://www.arb.ca.gov/research/apr/past/atmospheric.htm>.

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an offshore release along the coast from Long Beach to Ventura. In all the studied tracer releases, the offshore emissions were found to be advected onshore.

- The South Central Coast Cooperative Aerometric Monitoring Program (SCCCAMP).<sup>8,9</sup> The SCCCAMP study was performed to develop modeling data for ozone attainment planning analyses in Santa Barbara and Ventura Counties. The mesoscale meteorological patterns observed during SCCCAMP demonstrate the strong onshore patterns in the Project area, as well as the land-sea breeze interaction. These wind flows couple the onshore and offshore areas such that they cannot be analyzed separately (as is being done in the Draft Conformity Determination).
- The Southern California Air Quality Study (SCAQS).<sup>10</sup> This extensive study analyzed meteorological conditions, emissions, and pollutant formation (including ozone) from Ventura County through the South Coast Air Basin.
- The 1997 Southern California Ozone Study (SCOS97-NARSTRO).<sup>11</sup> The SCOS97 - NARSTRO meteorological network collected data from June 16 through October 15, 1997. Emissions, meteorological, and air quality data were assessed for five different types of multi-day ozone episodes. The interrelated nature of offshore emissions and onshore air impacts is studied and documented.
- Air Quality Impacts from NO<sub>x</sub> Emissions of Two Potential Marine Vessel Control Strategies in the South Coast Air Basin.<sup>12</sup> As part of SCOS97, tracer gases were released from two shipping lanes near the Project area – the current lane and a proposed lane farther from shore. The tracer gases were monitored onshore, and the results showed that both shipping lane releases impacted onshore air quality. Moving the emissions farther offshore did not always benefit onshore air quality, and in one test had a “disbenefit.”<sup>13</sup>
- Analysis of Aerometric and Meteorological Data for the Ventura County Region.<sup>14</sup> This report describes the various trajectories that carry pollutants into Ventura County, including several emanating from offshore areas.
- The Structure and Variability of the Marine Atmosphere around the Santa Barbara Channel.<sup>15</sup> This paper studies the mesoscale meteorological conditions between Pt. Arguello and the

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<sup>7</sup> Shair, F.H., et al., Application Transport and Dispersion of Airborne Pollutants Associated with the Land Breeze-Sea Breeze System, October 1981.

<sup>8</sup> Hanna, Steven R., May 1991. Characteristics of Ozone Episodes during SCCCAMP. *Journal of Applied Meteorology*, 30,5,534-550.

<sup>9</sup> Douglas, Sharon G. and Kessler, Robert C., May 1991. Analysis of Mesoscale Air Patterns in the South-Central Coast Air Basin during the SCCCAMP 1985 Intensive Measurement Periods. *Journal of Applied Meteorology*, 30,5,607-631.

<sup>10</sup> Blumenthal, D.L., Watson, J.G., and Roberts, P.T. 1987. Southern California Air Quality Study (SCAQS) Program Plan, Sonoma Technology Inc. Report to the California Air Resources Board, June 1987.

<sup>11</sup> Fujita, Eric M., et al., February 1999. SCOS97-NARSTRO 1997 Southern California Ozone Study and Aerosol Study, Volume III, Summary of Field Study. Desert Research Institute, prepared for CARB. 1998 AWMA papers available online at: [http://www.arb.ca.gov/research/scos/awma\\_98/awma\\_98.htm](http://www.arb.ca.gov/research/scos/awma_98/awma_98.htm); Publications available online at: <http://www.arb.ca.gov/research/scos/scospub.htm>.

<sup>12</sup> SCAQMD, and CARB, Air Quality Impacts from NO<sub>x</sub> Emissions of Two Potential Marine Vessel Control Strategies in the South Coast Air Basin, Final Report, September 2000.

<sup>13</sup> Ibid., p. 44.

<sup>14</sup> Blumenthal, D.L., Smith T.B., Lehrman, D.E. et al., 1986. Analysis of Aerometric and Meteorological Data for the Ventura County Region, Sonoma Technology Inc. Report to the Western Oil and Gas Association, June 1986.

Santa Monica Basin. The mean wind flow in the Santa Barbara Channel is shown to be strongly onshore, including the winds in the proposed Project area.

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All of these studies, and many others, can be referenced to show that the emissions and air flow at the Project location contribute to the onshore ozone nonattainment problem. There is no meteorological or air quality basis for the Draft Conformity Determination to exclude Project emissions from the SIP conformity requirements. Every study points to the opposite conclusion, including the Revised DEIR for the proposed BHP Billiton Project. It is unfortunate that the Draft Conformity Determination is attempting to deny years of intensive studies.

Even BHP Billiton's meteorological data and air quality modeling, which are presented in the Revised DEIR, hurts, rather than helps, the argument for excluding offshore emissions from the nonattainment SIP conformity analysis. The Revised DEIR includes modeling with the Offshore and Coastal Dispersion (OCD) model, which uses five years of meteorological data collected from one onshore (Oxnard Airport) and one offshore (Buoy Station 46025 – Santa Monica Basin) site.<sup>15</sup> These data are for the years 2000 through 2004. While these meteorological data stations were not established with air dispersion modeling in mind (airports and ocean buoys do not generally collect high-quality meteorological data, and are not site-specific), the general wind flow patterns should be adequately characterized by these data. A frequency analysis of the wind speeds and direction (direction from which the wind is blowing) for the Santa Monica Basin Buoy data is presented in the following table.

<sup>15</sup> Dorman, C.E. and Winant, C.D., February 2000. The Structure and Variability of the Marine Atmosphere around the Santa Barbara Channel. Monthly Weather Review, 128, 261-282.

<sup>16</sup> Revised DEIR, Appendix G7 – Sierra Research CEQA Air Quality Assessment.

Wind Frequency Distribution for: Santa Monica Basin Buoy (46025)							
Period of meteorological data set data: 1/1/2000 - 12/31/2004							
Wind Direction Sector (Degrees)	Downwind Area Impacted by this Wind Sector	% Non-Calm Hours	% from 0.1 - 3.0 m/s	% from 3 - 5 m/s	% from 5 - 10 m/s	% > 10 m/s	Average WS (m/s)
N: 348.75 - 11.25	Offshore	3.59	2.22	1.03	0.33	0.01	2.72
NNE: 11.25 - 33.75	San Nicolas Is.	2.55	1.64	0.55	0.30	0.05	2.87
NE: 33.75 - 56.25	Offshore	2.57	1.68	0.47	0.35	0.06	2.91
ENE: 56.25 - 78.75	Offshore	3.22	1.80	0.81	0.52	0.09	3.24
E: 78.75 - 101.25	SB Co. - Channel Is.	4.24	2.32	1.37	0.49	0.06	3.05
ESE: 101.25 - 123.75	SB Co.	4.47	2.47	1.37	0.53	0.10	3.17
SE: 123.75 - 146.25	Ven. Co. & SB Co.	4.54	2.65	1.37	0.46	0.07	2.98
SSE: 146.25 - 168.75	Ven. Co. - Ventura	3.80	2.58	0.89	0.30	0.02	2.57
S: 168.75 - 191.25	Ven. Co. - Pt. Mugu	3.49	2.52	0.68	0.26	0.03	2.49
SSW: 191.25 - 213.75	Ven. Co. - SE Coast	3.61	2.69	0.70	0.20	0.01	2.38
SW: 213.75 - 236.25	LA Co. - SW Coast	5.24	3.58	1.41	0.24	0.02	2.50
WSW: 236.25 - 258.75	LA Co. - Malibu	9.12	4.25	3.59	1.28	0.01	3.23
W: 258.75 - 281.25	LA Co. - Santa Monica	20.84	6.06	7.49	6.59	0.71	4.42
WNW: 281.25 - 303.75	LA Co. - Long Beach	12.15	4.04	4.14	3.05	0.93	4.55
NW: 303.75 - 326.25	LA Co. - Catalina	10.00	3.80	3.53	2.56	0.12	3.86
NNW: 326.25 - 348.75	Offshore	6.04	2.93	2.15	0.95	0.01	3.24
Totals:		99.45	47.20	31.54	18.41	2.30	
Total number of hours in meteorological data set: 43,848							
Number of calm hours: 242 (wind speeds less than 0.1 m/s)							
Period Ave. Wind Speed: 3.53 m/s							
Calm hours are not included in average wind speeds.							

Wind directions from each of the 16 cardinal compass points are shown in the above table, along with the percentage of winds that emanate from each of the 22.5 degree sectors centered on that direction. The frequency of winds, by wind speed category and for all hours, is listed for each of these sectors. Also shown is the representative downwind area impacted by the winds from each sector.

The predominant winds measured at the Santa Monica Basin Buoy are from the west/southwest to northwest, which directly impact Los Angeles County. This table shows that roughly 57 percent of the Santa Monica Basin Buoy winds blow ashore in Los Angeles County. Winds blow towards Ventura County about 15 percent of the time, and to Santa Barbara County with somewhat less than 10 percent frequency. Offshore winds (not blowing directly towards California) are measured about 18 percent of the time. In essence, emissions from the Project area will blow onshore roughly 80 percent of the time.

This finding is consistent with CARB's analysis of offshore emissions and the potential for these emissions to affect onshore air quality. CARB analyzed the prevailing wind direction, by month, at a number of coastal sites in central and southern California. For stations near the proposed Project, the prevailing wind direction (direction with the highest percent of frequency) blows onshore every month of the year at Santa Barbara, 11 months of the year in Oxnard, nine months of the year at Pt. Mugu Naval Air Station, and 11 months of the year at Santa Monica.<sup>17</sup> These results are supported by tracer studies, modeling exercises, and other analyses considered by CARB.

The modeling impacts from offshore Project sources (using the Santa Monica Basin Buoy data) are shown graphically in Figures 1-1 through 1-16 of the Revised DEIR, Air Quality Appendix G7. Each of these figures show that the proposed Project and marine vessels will increase onshore air concentrations of criteria air pollutants in Ventura and Los Angeles County, including the ozone precursor, NO<sub>2</sub>. This is a direct product of the prevailing winds on the Project area, which transport the offshore emissions onto onshore areas.

BHP Billiton, however, does not present any photochemical modeling for ozone formation potential. Rather, the air quality assessment (Revised DEIR Appendix G7, Section 2.1.2) attempts to use the Gaussian OCD modeling approach to support the conclusion that "the unique attributes of the proposed Project demonstrate that there is insignificant potential for the proposed Project to impact the onshore ozone nonattainment area." BHP Billiton does not provide any documentation, peer-reviewed, published, or otherwise, to support their unique method of characterizing ozone impacts from Gaussian dispersion modeling – a method that does not consider photochemical reactions and other parameters necessary to assess ozone impacts. Ozone formation from NO<sub>x</sub> and VOC emissions is not linear – BHP Billiton has not shown in any meaningful way that onshore ozone impacts caused by Project emissions will be insignificant.

And sometimes the simplest observation is the most telling: The BHP Billiton methodology for assessing the significance of potential ozone impacts is never used in regulatory ozone attainment analyses. Nonattainment SIP area modeling is complex, and requires detailed studies of three-dimensional meteorological parameters, initial and boundary conditions, photochemistry, regional emission inventories, and other inputs.<sup>18</sup> If the VCAPCD and the SCAQMD applied the flawed BHP Billiton reasoning to their ozone planning and permitting process (which they do not), no source would be culpable for contributing to the ozone nonattainment problem, and no progress at attaining (or at least maintaining) clean air standards would be possible.

Regulatory agencies have long recognized the need to address, reduce, and mitigate (offset) NO<sub>x</sub> emissions from offshore sources, including marine vessels. CARB specifically developed a definition of California Coastal Waters for this purpose, defined as "the area offshore of California

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<sup>17</sup> California Air Resources Board, Staff Report: Initial Statement of Reasons for Proposed Rulemaking. Proposed Regulation for Auxiliary Diesel-Electric Engines Operated on Ocean-Going Vessels Within California Waters and 24 Nautical Miles of the California Baseline. October 2005. Appendix F: Offshore Emissions Impacts on Onshore Air Quality.

<sup>18</sup> Tesche, T.W. and McNally, D.E., May 1991. Photochemical Modeling of Two 1984 SCCAMP Ozone Episodes. Journal of Applied Meteorology, 30,5,745-763.

within which pollutants are likely to be transported ashore and affect air quality in California's coastal air basins, particularly during the summer."<sup>19</sup> The SCAQMD, with CARB, prepared analyses of potential emission control strategies for marine vessels off of Southern California – the goal being to reduce onshore ozone impacts from these offshore emissions.<sup>20</sup> And the Santa Barbara County APCD has stated the problem very clearly: "Marine shipping, the largest unregulated source of oxides of nitrogen (NO<sub>x</sub>) emissions, remains a significant long-term obstacle to achieving ozone standards in coastal areas, as documented in the example of Santa Barbara County in California."<sup>21</sup> The Draft Conformity Determination, by exempting offshore activities from the SIP conformity analysis, is attempting to add the BHP Billiton's FSRU, marine vessel, and offshore construction emissions to this essentially unregulated category.

#### V. Project Emissions from Higher BTU Gas were not Included

The Revised DEIR briefly addresses the issue of increased regional NO<sub>x</sub> emissions that could be caused by higher BTU gas supplied through the proposed LNG terminal.<sup>22</sup> This "hotter" gas results from higher concentrations of C2-C4 hydrocarbons (ethane, propane, and butane) in the natural gas itself (which is mainly comprised of methane). Higher BTU gas results in increased combustion temperatures, and therefore potentially greater NO<sub>x</sub> emissions, as compared to gas meeting current CARB specifications for compressed natural gas as motor vehicle fuel.<sup>23</sup> Increased NO<sub>x</sub> emissions could result from stationary, mobile, and area source use of this potentially higher BTU gas.

The SCAQMD also addresses the increased emissions resulting from combusting higher heating value gas. As presented in the Revised DEIR, such use in stationary source non-residential natural gas-fired equipment could increase NO<sub>x</sub> emissions by over 20 percent.<sup>24</sup> By not addressing this concern, the veracity of the Draft Conformity Determination is in question. This is a potentially major source of NO<sub>x</sub> emissions that have not been incorporated into the area ozone nonattainment SIPs.

This is a perfect example of Project-associated emissions that need to be properly addressed by the Draft Conformity Determination to ensure conformity with the ozone nonattainment SIPs.

#### VI. Emissions from Construction Activities are Optimistic and Unverifiable

The Draft Conformity Determination presents calculated emissions for each of the various construction phases. These emissions are presented in the table below.

<sup>19</sup> California Air Resources Board, Report to the California Legislature on Air Emissions from Marine Vessels, Volume I, June 1984, p.78.

<sup>20</sup> SCAQMD, and CARB, Air Quality Impacts from NO<sub>x</sub> Emissions of Two Potential Marine Vessel Control Strategies in the South Coast Air Basin, Final Report, September 2000.

<sup>21</sup> Murphy, T.M., Santa Barbara County APCD, The Need to Reduce Marine Shipping Emissions – A Santa Barbara County Case Study, AWMA paper, 2003.

<sup>22</sup> Revised DEIR, p. 4.6-24.

<sup>23</sup> Letter from Tom Murphy, Santa Barbara County APCD to Lt. Ken Kusano, U.S. Coast Guard and Mr. Cy Oggins, California State Lands Commission, February 25, 2005.

<sup>24</sup> Revised DEIR, p. 4.6-24.

#### GC003-14 Continued

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Continued

#### GC003-15

As indicated in Section 4.6.2, the natural gas imported by the proposed Project would need to meet the requirements of Rule 30 and General Order 58-A of the California Public Utilities Commission (CPUC) or it could not be accepted for distribution by SoCalGas. Rule 30, as described, has specific requirements, including a heating value range.

Section 4.6.2 contains additional information on the regulatory setting affecting air quality and a revised discussion of the heating value of imported natural gas that incorporates the recent rulemaking by the CPUC. An analysis of the impacts of the CPUC rulemaking is beyond the scope of this document as required by NEPA and the CEQA.

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#### GC003-16

The emissions analyses are derived from and consistent with historic operation and construction schedules of comparable projects that incorporate typical deviations from normal conditions.

GC003-16

Construction Activity	Total Emissions (tons)					
	NO <sub>x</sub>	SO <sub>2</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	ROC
<b><u>Federal Waters</u></b>						
Mooring/FSRU Installation	27.4	0.02	33.8	1.6	1.6	4.0
Offshore Pipeline Installation	82.4	0.06	101.5	4.8	4.8	11.9
<b>Subtotal</b>	<b>109.8</b>	<b>0.08</b>	<b>135.3</b>	<b>6.4</b>	<b>6.4</b>	<b>15.9</b>
<b><u>Ventura County</u></b>						
Offshore Pipeline Installation	14.5	0.010	17.9	0.8	0.8	2.1
Shore Crossing Construction	37.8	0.027	46.4	3.5	2.5	5.5
Onshore Pipeline Installation - Trenching	16.5	0.017	24.8	1.9	1.4	2.6
Onshore Pipeline Installation - Pipelay	11.5	0.066	57.0	8.0	2.6	3.0
Onshore Pipeline Installation - Boring	5.5	0.004	6.7	1.0	0.5	0.8
Worker Commuting	0.54	0.067	7.9	0.14	0.14	0.25
<b>Subtotal</b>	<b>86.4</b>	<b>0.19</b>	<b>160.7</b>	<b>15.3</b>	<b>8.0</b>	<b>14.1</b>
<b><u>Los Angeles County</u></b>						
Onshore Pipeline Installation - Trenching	8.3	0.0084	12.4	0.94	0.71	1.3
Onshore Pipeline Installation - Pipelay	5.8	0.033	28.5	4.0	1.3	1.5
Onshore Pipeline Installation - Drilling	13.0	0.0092	15.9	1.4	0.93	1.9
Worker Commuting	0.41	0.0514	6.1	0.11	0.11	0.19
<b>Subtotal</b>	<b>27.4</b>	<b>0.10</b>	<b>62.9</b>	<b>6.5</b>	<b>3.0</b>	<b>4.8</b>
<b>TOTAL</b>	<b>224</b>	<b>0.37</b>	<b>359</b>	<b>28</b>	<b>17</b>	<b>35</b>

GC003-16  
 Continued

As discussed in Comment III above, the Draft Conformity Determination exempts emissions in Federal waters by attaching the Project to Anacapa Island, finds that Ventura County construction emissions are less than the conformity threshold of 100 tons/year NO<sub>x</sub> in a moderate nonattainment area, and determines that construction emissions within Los Angeles County do not conform to the SIP and must be mitigated. The emission offsets for this mitigation are not identified, however.

For the construction emissions in Ventura County, it is easy to identify a construction program and schedule that will exceed the conformity threshold of 100 tons/year NO<sub>x</sub> in a moderate nonattainment area. For example, the shore crossing construction emissions calculated for the Draft Conformity Determination include, among many other pieces of equipment, an AHTS (anchor handling/towing supply vessel) operating at only 10% load for 35 days. If the true load factor for this single piece of equipment was in reality 25%, the Ventura County construction emissions would be 100.7 tons/year, which would be non-conforming to the ozone SIP and require offsets. There are many such examples that could result in NO<sub>x</sub> emissions greater than 100 tons/year, instead of the calculated 86.4 tons/year, including:

- A slight delay in Project schedule;
- An underestimation of the time required to complete each phase;
- An underestimation of the number of equipment needed to perform any task;
- An underestimation of the equipment size and horsepower to perform any task;
- An underestimation of the equipment load needed for the construction activities.

Construction activities and emissions are not permitted and verified for compliance by the VCAPCD. It is disconcerting to imagine that the construction activities in Ventura County could

result in NO<sub>x</sub> emissions much greater than 100 tons/year, and yet the Project would go on without any mitigation at all. Yet this is a distinct possibility given any of the factors listed above and the likelihood of Project delays and difficulties not identified or accounted for in the construction emission calculations.

Based on my experience in calculating and modeling construction emissions, the Draft Conformity Determination is relying on an optimistic schedule and emission inventory. The entire onshore pipeline installation process allocates 180 activity days for trenching a distance of over 22 miles (combined Los Angeles and Ventura County onshore pipeline segments). The Draft Conformity Determination does not provide any comparative studies or examples to support that this implementation schedule is realistic. All assumptions used are undocumented. Also, potentially lengthy delays from pipeline crossings at difficult points, such as Highways 1 and 101 in Ventura County are not discussed. Neither are problems that could be encountered with high water tables, which are likely to be found in southern Ventura County. Delays or underestimated activity days translate into additional construction emissions not accounted for in the Draft Conformity Determination.

While it is helpful to identify what the expected emissions will be from construction, the Draft Conformity Determination does not specify any enforceable compliance conditions for these activities. We are asked to believe that construction scheduling, equipment size and number, and percent of operating power (load) will be as presented and will result in Ventura County NO<sub>x</sub> construction emissions less than 100 tons/year.

Unless it can be demonstrated that compliance conditions will be enforced on all construction activities, it is inappropriate for the Draft Conformity Determination to assume that NO<sub>x</sub> and other criteria pollutant emissions will not exceed the calculated values. This is particularly important for Ventura County construction emissions which are minimally at 86.4% of the conformity determination threshold for NO<sub>x</sub> already. Without enforceable commitments, the Draft Conformity Determination cannot proceed on the assumption that the emissions will conform to the SIP.

#### **VII. The Ozone Attainment Status of Anacapa Island is Irrelevant**

Table 1 of the Draft Conformity Determination shows the Federal air quality area designations for Ventura and Los Angeles counties. For Ventura County, there are two areas for designation: the mainland portion, and the Channel Islands, which include Anacapa and San Nicolas islands. Table 1 shows that the Channel Islands are in Federal attainment status for all criteria pollutants except SO<sub>2</sub>, which is unclassified due to lack of data.

The history behind the Federal ozone attainment status for Anacapa Island is murky at best. From 1991 through 1994, the VCAPCD used the EPA designation that all of Ventura County is nonattainment for ozone.<sup>25</sup> This was based on the November 6, 1991 Federal Register, page 56731, which listed all of Ventura County as the Ventura County nonattainment area. To confuse the

GC003-16  
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#### **GC003-17**

The determination of air quality designation of Channel Islands, including Anacapa Island, with respect to ambient air quality standards is under the jurisdiction of the USEPA.

GC003-17

<sup>25</sup> Letter from Richard Baldwin, VCAPCD, to David P. Howekamp, EPA Region IX, December 1, 1994.

matter, on the next page (56732) the Federal register designated the South Central Coast (remainder of), Channel Islands, as unclassifiable/attainment, even though Anacapa and San Nicolas Islands are part of Ventura County.<sup>26</sup> On December 5, 1996, at the request from the US Navy, the EPA wrote to the VCAPCD that Anacapa and San Nicolas Islands are not part of the Ventura County nonattainment area.<sup>27</sup> This letter also references that the VCAPCD Board specifically exempted San Nicolas Island from the AQMP requirements, pending a formal determination from EPA.

That Mainland Ventura County should be nonattainment for ozone and that San Nicolas Island (which is over 50 miles further offshore than Anacapa, and has no historical air quality data) should be attainment/unclassified seems clear. Caught in the middle of this uncertainty, however, is Anacapa Island. Anacapa is relatively near to the mainland – the closest of the Channel Islands, at about 14 miles from shore. Anacapa also has multiple years of air quality data, including ozone measurements.

Hourly ozone readings were collected on Anacapa Island from 1985 through 1992. The percent of data coverage, however, was less than desirable. For example, in 1989 and 1990, only four and two percent coverage during typical periods of high concentration were achieved, respectively. The best year for data collection was 1992, with 82 percent coverage during typical periods of high concentration. The average collection efficiency over the years 1985 through 1992 was only 48.5 percent.<sup>28</sup> The air quality monitoring effort at Anacapa Island ended in 1992.

Despite the short duration monitoring program and the relatively low number of hours of ozone data actually collected, Anacapa Island experienced a number of concentrations exceeding the State and Federal ozone standards. In 1988, 1991, and 1992 (the last three years with any meaningful data), there were six, three, and four days, respectively, exceeding the State one-hour ozone standard of  $0.09 \mu\text{g}/\text{m}^3$ . These three years also had four, three, and three days, respectively, exceeding the Federal eight-hour ozone standard of  $0.08 \mu\text{g}/\text{m}^3$ . The actual number of days exceeding ozone standards would have been significantly higher if the air pollution regulatory agencies (EPA, CARB, and VCAPCD) rounded up based on the third significant figure, rather than down. Thus, in regulatory algebra, an eight-hour average ozone concentration of  $0.084 \mu\text{g}/\text{m}^3$  does not exceed the NAAQS of  $0.08 \mu\text{g}/\text{m}^3$ . While this makes it easier for the regulatory agencies to demonstrate attainment, it is not a health-protective practice in any sense whatsoever.

An even easier method to “demonstrate” attainment is to just stop measuring any and all air quality data in a particular area. This is apparently what happened on Anacapa Island when the ozone monitoring station was removed, even though ozone concentrations exceeding State and Federal standards were measured on October 13, 1992 – only 18 days before the last data were collected. In a somewhat confusing set of correspondence between the VCAPCD, EPA, and the US Navy, the Federal ozone status for Anacapa became “attainment,” despite contradictory existing ozone measurements, the relatively short distance to the rest of the Ventura County nonattainment area, and the CARB designation for Anacapa as nonattainment for State ozone standards.

<sup>26</sup> Ibid.

<sup>27</sup> Letter from David P. Howekamp, EPA Region IX to Richard Baldwin, VCAPCD, December 5, 1996.

<sup>28</sup> CARB Air Quality Data CD Vol. 1.

GC003-17  
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For the Draft Conformity Determination, however, the attainment status for Anacapa Island should not matter. Emissions from the Project FSRU, marine vessels, and construction activities will impact onshore ozone nonattainment areas in Ventura and Los Angeles counties. The Clean Air Act requires the Coast Guard to consider whether all Project associated emissions will be consistent with any nonattainment SIPs – this has not been done. As discussed in Comment IV above, offshore NO<sub>x</sub> and ROC emissions are transported onshore, where they undergo photochemical reactions to form ozone. In fact, for a source with greater NO<sub>x</sub> emissions (relative to ROC), the highest ozone contribution often occurs at greater downwind distances, compared to culpable ozone levels in the near-field areas. This is because time is often needed for these photochemical reactions to occur, and with time the pollutants are advected downstream (and onshore) with the prevailing wind fields. This was demonstrated many times by the Santa Barbara County Air Pollution Control District in their Lagrangian photochemical modeling analyses of potential onshore ozone impacts from offshore oil development NO<sub>x</sub> and ROC emissions.<sup>29</sup>

From a geographical standpoint, the proposed Project is 21.4 miles from Anacapa Island, but only 13.8 miles from the nearest mainland landfall.<sup>30</sup> Yet, the proposed Project is deemed by the Draft Conformity Determination to be in the same air quality designation area as Anacapa Island. Interestingly, the closest mainland point to the FSRU is only about 0.4 miles west of the Los Angeles/Ventura County line.<sup>31</sup> Based on distance alone, the Project should be subject to the much stricter air quality requirements of the serious nonattainment status SCAQMD, and not the much more lax permitting setting that would be enjoyed on Anacapa Island.

There is no question, the Draft Conformity Determination is assisting the applicant in cherry-picking the Federal ozone attainment status that best suits its purpose. Of the three possible options – serious nonattainment within the SCAQMD, moderate nonattainment within the onshore portions of the VCAPCD, or a loophole-filled attainment status for Anacapa Island, the Draft Conformity Determination sides with the least restrictive and most distant set of requirements.

From an air quality standpoint, there is no basis for attaching the proposed Project to the Federal ozone attainment designation for Anacapa Island. The issue at hand is whether the proposed Project will have an onshore air quality impact (it will) and how can this impact be mitigated (offsets of NO<sub>x</sub> and ROC); however, the focus of the Draft Conformity Determination appears to be on finding ways to exempt the applicant from proper mitigation, including verifiable offsets for all Project and associated Project emissions. The favorable regulatory and permitting requirements identified in the Draft Conformity Determination aren't valid, and will only interfere with the VCAPCD and SCAQMD progress towards attaining and maintaining ambient air quality standards.

GC003-18

## GC003-18

The General Conformity Rule was promulgated pursuant to Section 176(c)(1)(B) of the Clean Air Act. In the public notice for the final General Conformity (58 FR 63214), the summary of the rule states that the criteria and procedures established in this rule apply only in areas that are nonattainment or maintenance with respect to any of the criteria pollutants. Accordingly, the applicability of Federal Actions as stated in the General Conformity Rule (40 CFR 93.153 (b)) is based on a comparison of "the total direct and indirect emissions in nonattainment or maintenance area caused by a Federal action" to threshold levels. Emissions projected to occur in attainment areas, unclassifiable areas, or areas not designated are not included in the applicability criteria of the General Conformity Rule.

<sup>29</sup> For example, such modeling was prepared for the Exxon Santa Ynez Unit FEIS/R.

<sup>30</sup> Revised DEIR, Figure 2.1-2. 12.01 NM = 13.8 miles; 18.61 NM = 21.4 miles.

<sup>31</sup> Ibid. The analogy of placing a casino on the left side of a jurisdictional boundary, while gambling is illegal on the right side, is inescapable.

**VIII. The Draft Conformity Determination did not Identify Project Offsets, thus Circumventing Public Comment on this Issue**

Because of the multiple non-conservative assumptions used in the Draft Conformity Determination, the only identified mitigation requirements are for pipeline construction NO<sub>x</sub> emissions within Los Angeles County. It is important to step back and comprehend this finding. A project with calculated (and optimistic) construction NO<sub>x</sub> emissions of 223 tons/year, operational and marine vessel NO<sub>x</sub> emissions of at least 231.3 tons/year, startup NO<sub>x</sub> emissions of 42.3 tons/year, and which is located next to and upwind of moderate and serious nonattainment areas for ozone, is only required to mitigate temporary NO<sub>x</sub> emissions of 27.4 tons.

It gets worse. The Draft Conformity Determination, however, does not even identify how the 27.4 tons of NO<sub>x</sub> emissions will be mitigated. In its Findings, the Draft Conformity Determination states that BHP Billiton has not provided documentation necessary to support emission reductions or any mitigation, and "Upon receipt of required documentations from BHPB, a final General Conformity Determination will be issued."<sup>32</sup>

It is not clear whether the Coast Guard intends that the public will have an opportunity to comment on the Final Conformity Determination.

It is imperative that the Draft Conformity Determination be corrected to identify that all Project and Project-associated emissions will require mitigation through verifiable offsets. In addition, the Draft Conformity Determination must include documentation from BHP Billiton, EPA, CARB, and the air districts verifying that these binding offsets have been procured for the life of the Project operational and construction emissions. The public must be provided with an opportunity to comment on this important information.

GC003-19

**GC003-19**

In March 2006, the USCG and MARAD solicited public input on a Draft General Conformity Determination, which concluded that NO<sub>x</sub> emissions generated from Project construction activities in Los Angeles County were subject to the General Conformity Rule. All other Project-related emissions were determined not to be subject to the General Conformity Rule. Subsequent to the issuance of the Conformity Determination, BHPB provided a written commitment that all onshore pipeline construction equipment would, to the extent possible, utilize engines compliant with USEPA Tier 2, 3, or 4 non-road engine standards with Tier 2 being the minimum standard for any engine.

Project emissions were then reanalyzed to assess the potential emission reductions associated with the stated commitment and to reassess the applicability of the General Conformity Rule. The revised General Conformity analysis concluded that all applicable Project emissions would be less than *de minimis* thresholds in both Ventura and Los Angeles Counties and, therefore, not subject to the General Conformity Rule. Based on this conclusion, the USCG and MARAD will not finalize the Draft General Conformity Determination.

Section 4.6.1.3 and Section 4.6.2 contain revised Project emission estimates and a revised discussion of the applicability of the General Conformity Rule to the Project, respectively. Appendix G4 contains a copy of the revised General Conformity analysis.

<sup>32</sup> Draft Conformity Determination, p.8.

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Camille Sears

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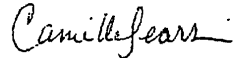
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#### IX. Conclusion

The Draft Conformity Determination is unreliable for purposes of verifying conformity with the Ventura County and South Coast Air Basin nonattainment SIPs – it must be corrected using data, calculations, and analyses that will adequately characterize and identify the full scope of Project emissions. Rather than assess the Project using conformity determinations for three separate and adjacent attainment/nonattainment planning areas, the Coast Guard must evaluate all Project emissions as contributing to the onshore ozone nonattainment problem for Ventura and Los Angeles counties. Accordingly, all operational, construction, marine vessel, and other associated emissions must be evaluated and mitigated with verifiable offsets greater than or equal to the total Project emissions liability. Only then can the Draft Conformity Determination adequately verify compliance with the applicable nonattainment SIPs.

Thank you for the opportunity to comment on the Draft Conformity Determination.

Sincerely,



Camille Sears

Attachments

GC003-20

#### GC003-20

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Michael Villegas  
Air Pollution Control Officer

May 11, 2006

LT Ken Kusano  
U.S. Coast Guard  
Docket Management Facility  
Room PL-401, Nassif Building  
400 Seventh Street SW  
Washington, DC 20590-0001

Subject: Draft Conformity Determination for the Cabrillo Port Liquefied Natural Gas  
Deepwater Port Project

Dear LT Ken Kusano:

The Ventura County Air Pollution Control District (District) has reviewed the March 2006, Draft General Conformity Determination for the Cabrillo Port Liquefied Natural Gas (LNG) Deepwater Port Project. We thank you for the opportunity to provide the following comments:

1. The Ventura County portion of the South Central Coast Air Basin is a moderate ozone nonattainment area for the 8-hour standard. The area is outside an ozone transport region, thus, general conformity thresholds for NOx or VOC (ROC) are 100 tons per year (tpy). The draft shows a 50 tpy threshold for ROC. GC004-2
2. USEPA has concluded that the LNG floating storage and regasification unit (FSRU) will be constructed and located in Federal waters within the Channel Islands attainment area and is not subject to general conformity. Regardless of whether the project is within or outside the attainment area, impacts on the Ventura County and South Coast nonattainment areas must be mitigated to comply with Section 176(c)(1)(B) of the Federal Clean Air Act and Section 93.153(g)(1) of the General Conformity Rule. GC004-3

If you have any questions regarding the District's review of the draft conformity determination, please call Ben Cacatian at 805/645-1428.

Sincerely,

Michael Villegas  
Air Pollution Control Officer

c. Scott Johnson, VCAPCD  
Jill Whynot, SCAQMD  
Sylvia Patsaouras, SCAG

GC004-1

In March 2006, the USCG and MARAD solicited public input on a Draft General Conformity Determination, which concluded that NOx emissions generated from Project construction activities in Los Angeles County were subject to the General Conformity Rule. All other Project-related emissions were determined not to be subject to the General Conformity Rule. Subsequent to the issuance of the Conformity Determination, BHPB provided a written commitment that all onshore pipeline construction equipment would, to the extent possible, utilize engines compliant with USEPA Tier 2, 3, or 4 non-road engine standards with Tier 2 being the minimum standard for any engine.

Project emissions were then reanalyzed to assess the potential emission reductions associated with the stated commitment and to reassess the applicability of the General Conformity Rule. The revised General Conformity analysis concluded that all applicable Project emissions would be less than *de minimis* thresholds in both Ventura and Los Angeles Counties and, therefore, not subject to the General Conformity Rule. Based on this conclusion, the USCG and MARAD will not finalize the Draft General Conformity Determination.

Section 4.6.1.3 and Section 4.6.2 contain revised Project emission estimates and a revised discussion of the applicability of the General Conformity Rule to the Project, respectively. Appendix G4 contains a copy of the revised General Conformity analysis.

GC004-2

The revised General Conformity Analysis contains a *de minimis* threshold of 100 tons per year for volatile organic compound (VOC) emissions in Ventura County.

GC004-3

The General Conformity Rule was promulgated pursuant to Section 176(c)(1)(B) of the Clean Air Act. In the public notice for the final General Conformity (58 FR 63214), the summary of the rule states that the criteria and procedures established in this rule apply only in areas that are nonattainment or maintenance with respect to any of the criteria pollutants. Accordingly, the applicability of Federal Actions as stated in the General Conformity Rule (40 CFR 93.153 (b)) is based on a comparison of "the total direct and indirect emissions in nonattainment or maintenance area caused by a Federal action" to threshold levels. Emissions projected to occur in attainment areas, unclassifiable areas, or areas not designated are not included in the applicability criteria of the General Conformity Rule.